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ARCHAEOLOGICAL DISCUSSIONS (January-June, 1911)

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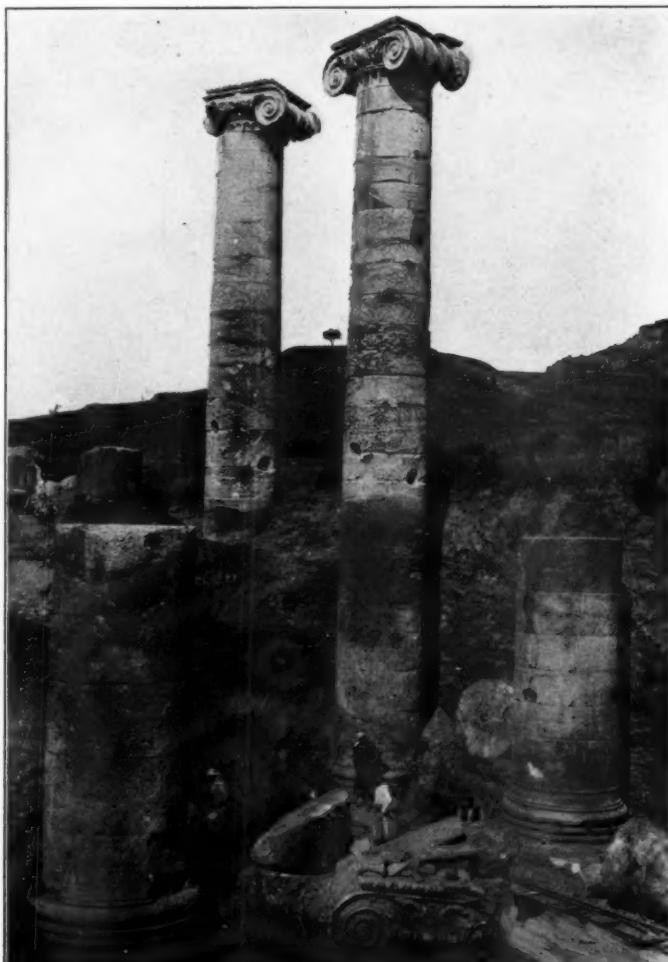
AMERICAN JOURNAL OF ARCHAEOLOGY, SECOND SERIES VOL. XV (1911) PLATE X



SARDES. VIEW OF THE EXCAVATIONS, 1911, FROM TOP OF HILL AT THE SOUTH

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SARDES. SOUTHEAST ANGLE OF THE TEMPLE. VIEW FROM THE
SOUTHWEST

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SECOND PRELIMINARY REPORT ON THE AMERI-
CAN EXCAVATIONS AT SARDES IN ASIA MINOR

[PLATES X-XI]

THE second campaign of the American excavations at Sardes opened early in February, and was continued until near the end of June, 1911, under the same general direction as last year, with Mr. William H. Buckler as assistant director, in charge of the inscriptions and of the excavation of tombs. Mr. Charles N. Read, C.E., assistant engineer during the first season, held the post of engineer in chief, and Mr. Harold W. Bell again had supervision of the pottery and the catalogue; while Mr. Edward R. Stoever, C.E., acted as assistant engineer, with Mr. William R. Berry as the third member of the engineering party.

Work upon the excavation of the temple was somewhat impeded, during the first ten days, by unusually heavy falls of snow and by cold of extreme severity for the locality; but the tombs, in the mountain side across the Pactolus, offered a more protected spot and a less exposed form of work, so that the excavation of them was begun without delay, and all efforts were concentrated there until digging at the temple site was resumed on February 16. It may be recalled that the excavations of the first season were begun at the river bank, and were carried eastward toward the two standing columns, considerably over 100 metres distant, which mark the far end of the great temple. The lowest possible level, that is, the hardpan just above the river, upon which the digging was commenced, was soon abandoned for a level of pavement, over a metre higher, upon which an ancient building and a row of stelae bases were cleared. This level, number two, tentatively

called the Lydian level, was in its turn abandoned soon after the foundations of the temple were reached, though excavations were still carried on, at a few points, around the marble foundations of the temple, in search of remains of an older structure. The greater part of the digging, however, was done above the temple platform until the end of the season. The width of the excavation, being only fifty metres, did not embrace the entire width of the building; but the close of the first campaign saw a little less than a third of the temple unearthed, including the foundation piers of six of the eight columns at the west end, two of the inner row at the same end, and seven on the south flank, besides the whole of the opisthodomos, with the piers of its two interior columns, and a part of its north wall which stands over two metres high above the floor level and bears a long Greek inscription.

The chief aim of the season just closed was the complete excavation of the temple, but work to this end was attended, from the first, by difficulties far greater than any which were encountered last year; for the reason that, with every metre's advance, the accumulation of soil above the ruin became higher until a height approximating ten metres was reached, and because the masses of fallen building stones and architectural details which came to light as the work progressed were far greater and much more unwieldy than those which were found last year. It is quite certain that we should have been greatly crippled in the prosecution of the work if we had been limited to last year's equipment of railway facilities and lifting apparatus; but, fortunately, the railway had been augmented by the purchase of more wagons and a locomotive engine, and a powerful crane had been substituted for the simple lever jacks of the earlier season. The work progressed well, with a force of about an hundred laborers, during the difficult process of fetching the new equipment from the line of the Smyrna-Cassaba railway; but no serious obstacles appeared before its arrival at the excavations, which occurred in good time to prevent delay on the work; from that time excellent progress was made, week by week, until the end of the season. The cutting back of the ever heightening east face of the excavation was continued without interruption, with a double force of laborers,

and the north and south faces were cut away so that the width of the excavation should embrace both flanks of the temple, with sufficient space on either side for the accommodation of



FIGURE 1.—EXCAVATIONS AT THE TEMPLE OF ARTEMIS FROM ACROSS THE PACTORUS.

three lines of railway, one for each of the three levels upon which it was necessary to work owing to the increasing height of the east face. The lowest lines, one on either side, were continued on the old level number two, and were used comparatively little except for the widening on either side of the

so-called Lydian building; but the finds on this lowest level were the most encouraging for the future, including, as they did, a stele with a long Lydian inscription upon it, practically *in situ*, as it had fallen forward at a time when the soil about it had risen to the top of its base, which was about a metre high. Two of the other four lines of railway were laid upon the level of the temple platform, and the remaining two from one to two metres higher, so that the uppermost lines had to carry off



FIGURE 2.—FLUTED COLUMNS OF THE TEMPLE OF ARTEMIS.

from three to seven metres of accumulated soil. One may say that the greater part of the work of the season was devoted to the removal of from three to ten metres of top soil, the upper two to seven metres of which consisted of earth and sand washed down from the acropolis, and contained nothing of archaeological value. But the area of the excavation was greatly increased over that of last year, as one may see by comparing the photographs presented herewith (PLATE X; Fig. 1) with the photograph published in last year's report (cf. *A.J.A.* XIV, 1910, p. 402).

From time to time the upper parts of walls and columns, which were standing during the Middle Ages, have fallen, and have been buried in later accumulations of earth washed down from the mountain. These details, some of them weighing many tons, are now found suspended, as it were, in loose earth high above the solid level of the temple platform, and constitute the chief obstacles and dangers in excavating. At the end of the campaign the cella had been cleared out, and all the space



FIGURE 3.—EASTERN PART OF EXCAVATIONS; WALLS, COLUMNS, ETC.

occupied by the twenty columns on the south side had been excavated; two of the columns preserve half of their original height. The space for eighteen columns on the north side was laid bare. One of the two complete columns at the east end was exposed to its base (PLATE XI); and four columns of the inner row at this end, standing to half their original height, were brought to light, together with two highly finished fluted columns with carved bases, almost half their original height, which flank the entrance (Fig. 2). There remain now to be excavated only the six northernmost columns of the eastern portico, one of which is complete, and the remainder of which are standing to almost

half, or half, their original height. There will thus be at least thirteen columns preserving seven to nine metres of height, in addition to the two complete columns which are about eighteen metres high, all grouped about the eastern end of the temple. The south wall of the cella and the southeast anta are preserved to a height of from four to six metres (Fig. 3), and the jambs of the eastern portal stand about four metres high; so that this end of the temple is beginning to present a very imposing appearance.

Practically all of this work has been carried on above the platform level; the next task will be to excavate to the level at the foot of the temple steps, which will add two metres to the depth of the excavation, and then to dig some two metres deeper still, whenever possible, to the Lydian level, which, with the increase of height to the eastward, will give a depth of about fifteen metres at a point twenty metres east of the temple.

The progress of the work disclosed the fact, suspected last year, that the entire cella had been converted into a cistern, probably at a time when the walls were already partly buried. The whole interior had been dug out, and the bottom filled with concrete covered with a layer of *opus signinum*. The concrete in the opisthodomos had been laid upon the floor level and was almost two metres deep. The floor of the long cultus chamber was over a metre higher than that of the opisthodomos, and, to make the bottom of the reservoir all on one level, and to give an ample thickness of concrete below it, the dividing wall was destroyed to its foundations, the pavement was torn up, and the upper courses of the foundations of the interior columns were removed (Fig. 4). Nevertheless not all traces of the original plan of the interior were destroyed; for it is still plainly to be seen that the floor of the cultus chamber was considerably higher than that of the pteroma and the treasury, which were on one level; that there were two interior columns in the treasury, and ten, in two rows, in the cultus chamber; for the marble foundations of all these columns still exist. It is further evident that a thin curtain wall was carried across the cultus chamber, two bays east of the thick wall between the cultus chamber and the treasury. Directly east of this curtain wall was found a solid square foundation, filling the entire space

of one bay between the two rows of interior columns, and consisting of two thick courses of purple sandstone blocks, well fitted together and often clamped with iron. The material is the same as that employed in the so-called Lydian building ; the position corresponds to that of the "basis" found by Hogarth in the temple at Ephesus. It probably belonged to an older temple. The steps which were excavated last season within the western porch at its north side were completely excavated



FIGURE 4.—VIEW INSIDE THE CELLA, LOOKING EASTWARD.

this year, and were found to be a flight of seven, the top step of which was set on the line of the cella wall, beginning at the northwest anta and extending westward to the outside of the inner row of columns. The exact disposition of these steps at their extreme west end cannot be determined until the east end of the temple, where corresponding details are undoubtedly in a better state of preservation, has been excavated. It should be possible in time to draw a complete and exact ground plan of the temple without recourse to conjecture.

The architectural details discovered in the excavations are of the highest interest and of great beauty, and corroborate other evidence to show that the temple was built at the best period of the Ionic style,—the beginning of the fourth century. The Ionic order was employed on three different scales, one for the exterior order, one for the columns of the treasury, and a third for the interior of the cella proper. The details further suggest that the columns at the west end of the temple were all fluted, although it is known that those at the east end, with the exception of two between the antae, were not fluted, and were otherwise incomplete. The excavations of last year yielded no evidence that the temple was in use after the first century A.D., and thus supported the assumption that the temple was destroyed in the great earthquake of the year 17 A.D., and was not rebuilt. This year's digging has brought to light inscriptions and other evidence, which almost may be taken as proof that the temple was used in the second century A.D., and I am inclined to the belief that the unfinished condition of parts of the building is due to uncompleted restorations begun after the great earthquake; for the capitals of the two standing columns represent two different types (PLATE XI): one has the deeply cut, open egg-and-dart moulding common to capitals of the best Greek period; while the other has the shallow, closed egg-and-dart usually seen in Roman work. One capital appears to be a Greek original, the other a Roman copy, and I think it not impossible that all the columns at the eastern end, wholly or partly ruined by the earthquake or by some other means, were taken down, and their shafts were rebuilt; but such of their capitals as had not been injured were replaced upon the new shafts. Some of the bases excavated this year are highly finished and others are only partly executed; this fact, I think, points to the same conclusion. All the capitals found during this season are of the beautiful early type, and are exquisitely finished; two of them are almost intact. One huge torus, belonging to a column base, carved with small leaves in a sort of scale pattern, and fragments of other, and differently carved, torus bases were found this year, not *in situ*; and the two fluted columns referred to above as standing to half their original height, between the eastern antae (Fig. 3),

have bases of the Asiatic type, with carved torus moulding and delicately executed scotia, elevated on pedestals about two metres high. The faces of these pedestals were left quite rough, though their joints are admirably true, and I have no doubt that they were to be sculptured, like the pedestals from Ephesus now in the British Museum. The architrave is exceedingly high, with three bands and a deeply projecting, but uncarved, cymatium; the entablature may have been what is called an architrave order, *i.e.* without a frieze. In any event, neither frieze nor cornice has yet been found. The outer faces of the jambs of the portal, those fragments of the lintel which have been found, and the two consoles that flanked the lintel are richly carved in the best Hellenic style; and a complete restoration of this great doorway, seven metres wide, can be drawn accurately with all its beautiful details.

It was not to be expected that statues or inscriptions would be found in any considerable numbers in these upper layers of top soil that we have been removing this year, or in the cella, which was thoroughly cleaned out when the reservoir was made. The small spaces excavated on lower levels have yielded almost all the inscriptions which were found this season, and the only fragments of statuary discovered were found either on these lower levels or in the concrete filling below the bottom of the reservoir. The Greek inscriptions were found upon statue bases, or upon stones which had been part of a wall, not temple wall, and which had been thrown near the outer steps of the temple. The only important fragments of statues discovered were two colossal male heads in a badly broken condition, though pieces of hair, of beard, and of drapery, all in good style, promise better things as excavation on the lower level progresses. Coins, chiefly of bronze, continue to come to light in considerable numbers, and still serve as guides to the age of different levels. They are, for the most part, Hellenistic, late Roman, and Byzantine; for the dearth of Roman imperial coins earlier than Constantine's still continues. Silver tetradrachms, to the number of fifty-four, were found in open vertical joints between the stones of the upper course of the sandstone "basis" in the middle of the cella and the marble foundation stones of one of the interior columns on the north

of it. The coins were, for the most part, unused, and in a perfect state of preservation; they have the heads and superscriptions of Alexander, Antigonus, Seleucus, Antiochus, Lysimachus, Philetaerus, and Demetrius Poliorcetes. Copper coins of Hellenistic dates were found in other vertical joints between the upper courses of the "basis" and the marble column foundations, and a silver coin of Croesus was discovered below the lower course of the sandstone "basis." A deep excavation below the "basis," carried on by means of trenches, over three metres in depth, failed to reveal any evidence of a temple deposit here; layers of sand and gravel mixed with small fragments of very ancient pottery constituted the upper levels, and sand and gravel the lower, on the level of the river. It is an open question whether or not the coins mentioned above are to be considered as intentional deposits or as accidents.

The excavation of tombs in the necropolis on the hillside across the river, facing the temple, was carried on throughout the season, under the supervision of Mr. Buckler. Over two hundred tomb chambers were opened, aggregating a possible average of six burials each. Great numbers of objects were found, of gold, of silver, and of bronze, together with great quantities of pottery; and some important deductions can be drawn from a general survey of the whole number of tombs excavated. It appears that all, or most, of the tombs were made at an early period, and were cleared out and re-used, from time to time, during several centuries. This is evident from an examination of the fragments of pottery which are found in the soil on the slope below the tombs. The tombs were cut out of the sloping hillside, in from three to six tiers, one above the other, and were reached by narrow roads running along each tier. The entrances to the tombs of the upper tiers are hardly concealed, while those to the lower tiers have been deeply buried by erosion. In the mass of débris which covers the entrances, and often on the floor of the entrances themselves, one finds sherds of several different epochs, *i.e.* fragments of pottery distinctly resembling the pottery of the Mycenaean age, fragments of early black-figured and later red-figured ware, corresponding to pottery of the sixth, fifth and fourth centuries in Greece, and sherds that are even later.

In several tombs, large urns, filled with charred bones, were found, with inscriptions written upon them in ink, that cannot be dated earlier than the first century B.C. The masses of loose fragments on the slopes contain also broken masks of terra-cotta in archaic style, and in the style of the fourth century, together with broken terra-cotta figurines of at least two different epochs.

Comparatively few of the tombs, I should judge, have been rifled in modern times, though most of them were cleared out for re-use at least once in their history, and many of them two or three times. Only a single tomb was found with the oldest form of pottery inside its chamber. This had escaped clearing out and a second use, for the reason that the floor of the tomb directly above it had collapsed and fallen into it at an early period, rendering it useless as a tomb, and crushing all of its pottery. But most of the fragments of the pottery were recovered, and, since they have been sorted, show that there were over fifty separate pieces, large and small, of widely different quality, in black, yellow, and red clay, and in a great variety of shapes. One large vase, ornamented in bands, and resembling Rhodian ware, bears animal figures well drawn in broad black outlines; a smaller jug, of yellow clay, is adorned with concentric circles in brown, precisely like Mycenaean pots found in Greece, and there are numbers of vases representing the amphora, the crater, the skyphos, and the oenochoë in shape, covered with a thin black glaze, decorated with thin horizontal stripes of white and with neck ornaments of white dots. No objects of metal were found in this tomb.

Not one tomb containing unbroken or undisturbed pottery with the heavy black shining glaze, like some of the fragments found on the slopes, was discovered, nor one with black or red figured ware. Indeed, most of the unrifled tombs contained only unglazed pottery, with occasional examples of small black glazed vases with painted decoration in white and yellow, or of yellow unglazed pots with delicate painted designs in black and brown, and a few specimens of moulded ware in various charming designs; and little of the pottery is to be dated earlier than the fourth century B.C. It would seem that at the later period, in the first century B.C., let us say, when incineration was practiced,

and when large vases of charred bones were placed in the tombs, it was not deemed necessary to clean the tombs out completely; for these cinerary urns have been found standing on couches strewn with bones of bodies that were not burnt, in tombs with pottery of an evidently earlier date, and, in the case of a tomb on one of the highest tiers, with cups of egg-shell thinness and a terra-cotta figurine, which are certainly earlier than the urns. In a number of instances sarcophagi of terra-cotta, usually broken, were found in tombs with other burials which had no coffins; in three tombs stone sarcophagi were found, and in one a marble cist filled with ashes and charred bones. Two marble stelae were discovered in tomb chambers; these had been painted, but the color designs had disappeared. The form of the letters on these stelae, inscriptions written on certain vases, and coins found in a number of tombs, are all aids in dating the pottery and other objects in the tombs.

Objects of metal are seldom found in tombs with good pottery, except in a few cases where these objects are bronze mirrors, which occur very commonly in tombs of many classes. A number of bronze pitchers, with swelling bodies, small necks, and high handles, were discovered in tombs where little else was found. Some of these vases were highly gilded, others have ornamented lips, and one has the head of a Silenus, executed in good style, at the point where the handle joins the body. Little jugs, moulded bowls, mirrors, a libation bowl, and a ladle, all of silver, are among the larger objects in this metal brought to light in the tombs. The libation bowl is richly ornamented with repoussé designs of lotus buds, and the handle of the ladle terminates in a beautifully wrought calf's head. Smaller objects in silver are little dishes, ointment stirrers, rings, and mountings for seals.

Little glass has been discovered as yet, but the few pieces discovered are of unusual beauty, one of them being a complete "tear bottle" in figured glass of that early kind commonly known as Phoenician; the others are only highly iridescent. Alabastra are frequent accompaniments to pottery good and bad. These exhibit a variety of shapes, but many of them are in fragments.

Gold and gems were found in the least expected places, and

seldom in connection with good pottery, or with bronzes, excepting mirrors. The earrings, large and small, the bracelet, the finger rings, and the necklaces of beads in many different designs, now all unstrung, are difficult to date, but are all of great interest and beauty. The resemblance between this jewellery found in Lydia and the well-known Etruscan jewellery is worthy of remark, and may have important historical significance. The seals are perhaps the most interesting objects found in the tombs, and, taken together, they form a collection of rare beauty and artistic value, to say nothing of their great value as antiquities. While a small number of these stones date from the Hellenistic period, and were drawn from Greek models, including one large seal bearing an intaglio of Athena and Hermes, set in a bracelet of gold, the majority are of the Greco-Persian period; that is, were gems of Persian design, cut probably for Persian nobles, by Greek artists. Most of them are of chalcedony in conoid form, set in silver or in gold. One is a scaraboid of red carnelian, set in a gold ring. Bulls and lions, singly represented or in combat, kings, or gods, enthroned or fighting griffons, and harpies symmetrically arranged are among the designs depicted with exquisite technique on these seals. Gems of this sort can be dated within quite narrow limits, and they may serve to give dates to objects found with them, though it may be argued that a seal found in one of our sieves might have escaped one or more clearings out of a tomb in ancient times when sieves were probably not employed.

While the tombs on the lowest tiers were being excavated, some low, crude walls were encountered near the edge of a bluff rising steeply from the river. These walls seem to have been the foundations of houses, the upper parts of which were built of sun-baked bricks, with roofs and other details in terracotta tiles. A great quantity of large roof tiles was found, made of a fine quality of clay and very well baked. Some of the flat tiles and many of the imbrex tiles bore signs of simple painted decoration which had been burnt in like a glaze. Tiles for the eaves were turned up in a tall sima with water spouts at regular intervals. These simas were decorated with designs in relief, some in geometrical pattern, or in conventional designs of lotus, others with animal figures, — lions and horses, —

drawn in archaic manner and very well executed. All of the designs were colored in bright tints, and several of the specimens found still preserve their color. These colored tiles represent probably two or three centuries, and all are ancient, certainly older than the fourth century, and many may date from the sixth century or earlier. Thus far most of the tiles found are broken, but they promise well for the deeper excavations of the future.

Thus rapidly sketched, this description of the excavations at the temple and at the tombs, and the hasty enumeration of objects found in the tombs, must serve as a general preliminary report for the season of 1911 at Sardes. A later number of this JOURNAL will contain a more detailed report of the Greek inscriptions, prepared by Mr. Buckler and Dr. Robinson; and, in another issue, Dr. Littman, of the University of Strassburg, will present the new Lydian inscription for the scrutiny of scholars.

HOWARD CROSBY BUTLER.

PRINCETON UNIVERSITY.

September, 1911.

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THE PURIFICATION OF ORESTES

THE misfortunes of the house of Atreus played so important a part in Greek mythology and furnished the ancient dramatists with so many tragic plots that it is not surprising to find them taking a prominent place in the work of the minor artists of Greece. The vase painters in particular seized upon the various episodes of the story as striking subjects for the decoration of their vases, and no inconsiderable number of these paintings have come down to modern times. The story of the flight of Orestes to Delphi pursued by the Furies seems to have been especially popular in antiquity, and Roscher in his *Lexikon* (III, cols. 979-984) records no less than thirty-four ancient monuments upon which some portion of this incident is portrayed. There is, however, one part of this story which apparently received scant attention from ancient artists, namely the purification of Orestes at Delphi by Apollo through the sacrifice of a pig. This freed him of blood-guiltiness, if not from the pursuit of the Furies. The incident is referred to by Aeschylus in the *Eumenides* in the following words (ll. 270-273):

θρίξει γάρ αἷμα καὶ μαραίνεται χερός,
μητροκτόνον μίασμα δ' ἔκπλυτον πέλει·
ποταίνον γάρ δὲ πρὸς ἵστιόν θεοῦ
Φοίβον καθαρμοῖς ἡλάθη χοιροκτόνοις.

No ancient monument so far as I have been able to discover has yet been published which exactly represents this purification through the sacrifice of a pig. The nearest approach to it is a scene on a vase from Lower Italy, now in the Louvre, which has been known since 1841 and repeatedly published¹ (Fig. 1). Upon a stand placed on a two-stepped base rests

¹ See the list given by Hauser in Furtwängler and Reichhold's *Griechische Vasenmalerei*, Series II, Text, p. 330, Note 2. The latest and best reproduction, to which my attention was called by Professor Chase, is *ibid.*, pl. 120, 4.

the omphalos covered with the *agrenon*, in front of which sits the nude Orestes, sword in hand. Before him are three Furies, near whom is the ghost of Clytaemnestra rising from the ground and pointing her finger at her guilty son. Behind Orestes stands Apollo holding with his extended right hand a pig above the head of Orestes while with his left hand he grasps a small olive tree. At the right stands Artemis. In the field above is what seems to be a shield. Hauser, who



FIGURE 1.—PURIFICATION OF ORESTES (vase in the Louvre).

discusses the vase at some length,¹ thinks that the painter had in mind a scene which he had beheld upon the stage, and argues that this painting is evidence for the production of the *Eumenides* of Aeschylus in Southern Italy as early as 430 B.C., at which time he dates the vase. But be that as it may, Apollo is not slaying the pig. Apparently the animal has already been killed, and its blood allowed to run down upon Orestes instead of merely wetting his hands.² The blood of the pig

¹ *Ibid.* Text, pp. 330-333.

² See Apol. Rhod., *Argonautica*, IV, 704 ff.; K. O. Müller, *Eumeniden*, pp. 146 f.; and particularly Roscher, *Lexikon*, III, col. 979, with the bibliography there given.

stones for the blood shed by the murderer, just as in the *Iphigenia in Tauris* of Euripides Iphigenia takes lambs with her on her pretended errand of purification

ώς φόνῳ φόνον
μνοσαρὸν ἐκνύψω.¹

In the Museum of the University of Pennsylvania there is an Etruscan mirror hitherto unpublished upon which the purification of Orestes is better represented (Fig. 2). This mirror was bought in Perugia in 1893 and presented to the Museum by Mr. Fairman Rogers. It is in rather poor condition, but the design upon it can be made out without difficulty. Its genuineness is beyond question. The mirror is nearly round. Its width is 18.8 cm., and its length 20 cm., being prolonged at the lower part where a metal handle 5.7 cm. long is attached. This handle consists of two thin plates of bronze fastened by three rivets to a tang projecting from the mirror proper. In antiquity this was probably covered with another handle of some perishable material. There are two small breaks. On the right a piece about 7 cm. long is missing near the rim; and near the left side is another small break about 1.5 cm. long. Neither of them interferes with the design, which except in a few details can be made out everywhere.

In the centre with his right knee resting on the ground is a nude man. In his right hand he holds a short two-edged sword, while his left arm is thrown around the omphalos. His body is turned to the right, but he is looking back over his shoulder at a male figure standing behind him. Beside his face is his name written retrograde, as are all the inscriptions on the mirror, *ὈΡΕΣΤΕ* i.e. *urste* or Orestes. Behind him, nude to the waist, is the second male figure. A himation is wound about his hips and hangs in folds about him. In his raised left hand he holds by the hind leg, above the head of Orestes, a pig which he is about to slay with the knife in his right hand. Above him, enclosed in a rectangular frame, is his name *ΑΠΛΟ*, *aplu* or Apollo. The objects beneath his feet are evidently intended for rocks.

Facing Apollo, on the other side of Orestes, is a female figure

¹ Eur., *I. T.*, 1223 f.

somewhat injured. She is standing upon a rock and her drapery hangs in folds about her. She wears the chiton and possibly also the himation, but has no distinguishing attribute.



FIGURE 2.—PURIFICATION OF ORESTES (mirror in Philadelphia).

Her left hand hangs by her side, but her right is extended and takes hold of the pig which Apollo is about to sacrifice. Her name is written above and to the left of her head **AVR3M**,

that is, *metua*. This name apparently does not occur elsewhere. The figure would naturally represent Artemis; or the ghost of Clytaemnestra, as on the vase in the Louvre; or a Fury. The lack of attributes, as well as the name, seems to exclude Artemis; and the Etruscan forms of Clytaemnestra according to Roscher (*Lexikon*, Vol. II, col. 1232) are *Cluthumustha*, *Clutumsta*, *Clutmsta*, or *Clutumita*. It is likely, therefore, that the figure is intended for a female demon or Fury called in Etruscan *Metua*, and that she is trying to interfere to prevent the sacrifice.¹

Behind Apollo, seated on a pile of rocks, is another female figure which at first sight appears to be nude. Traces of her chiton are, however, visible at the neck and on her left arm. She is looking up towards Apollo. The serpent wound about her right arm and the expression of her face are sufficient to identify her as a Fury. It should be noted that she has no serpents in her hair. In front of her face, enclosed in a framework, is her name in four letters **ONAJ**, *vanth*. Vanth is well known as an Etruscan divinity of the lower world, and it is not surprising to find her appearing here as a Fury.

The omphalos has its usual elliptical shape and is covered with fillets crossing at right angles, perhaps the *agrenon*. It stands upon a flat rock, which together with the other rocks is no doubt intended to indicate the character of the place where the scene is laid. That this was Delphi the presence of the omphalos makes certain.

The whole design is surrounded by a carefully drawn border 2 cm. wide consisting of an alternating palmette and lotus bud pattern which comes to an end on either side of the handle. Beneath the figures is a band of hatched triangles 1.1 cm. wide

¹ Professor O. A. Danielsson, of the University of Upsala, suggests in a letter to me the possibility of connecting *metua* with *metvia*. The latter appears twice as a woman's name on Etruscan mirrors. In one case the accompanying figure is clearly intended for Medea; in the other three dancing women are represented, named *Turan*, *Recue*, and *Metvia*. (See Körte, *Etrus. Spieg.* V, p. 117, Note 3; and Deecke in Roscher's *Lexikon*, II, col. 2943.) He writes, "Metua und *metvia sind aber lautlich und orthographisch ziemlich gleichartige Formen, und *metra und metria könnten sich möglicherweise wie θana : θania u. ä. verhalten: also metua = metvia?" But he adds, "Dies ist aber eine Hypothese auf die ich selbst sehr wenig gebe."

below which is a fish, perhaps a sturgeon. On either side of it are the tails of dolphins as if in the act of diving. On the front of the mirror a bead moulding runs around the edge; and

a palmette design 4.5 cm. high is placed at the base of the handle (Fig. 3).



FIGURE 3.—PALMETTE ON HANDLE OF MIRROR. (Scale 1:2.)

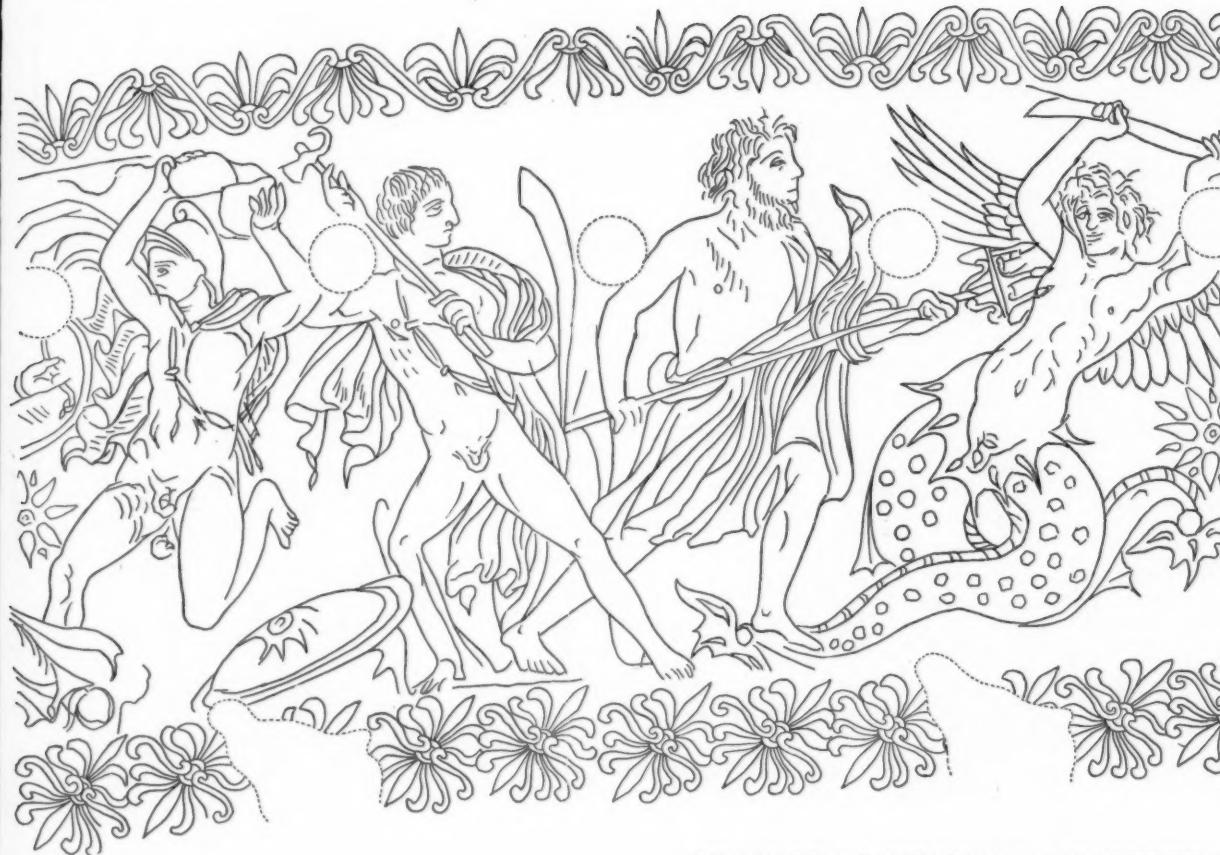
The drawing of this mirror is good. The treatment of the hair in particular is free and natural and shows more than ordinary skill. Unfortunately it is difficult to reproduce it accurately in a drawing. The style, as well as the character of the letters in the inscriptions, dates the mirror in the fourth century B.C. Whether the scene was inspired directly by the tragic stage it is impossible to say; but if Hauser's arguments hold good for the vase in the Louvre they may perhaps apply to this mirror. At least it is an important addition to the number of Etruscan mirrors engraved with Greek myths, and an interesting illustration of a passage in the *Eumenides* of Aeschylus not otherwise so closely reproduced.

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THE PRINCIPAL DECORATION OF A PRAENESENTE



LINE CISTA IN THE COLLECTION OF JAMES LOEB, ESQ.

Archaeological
Institute
of America

A PRAENESTINE CISTA IN THE COLLECTION
OF JAMES LOEB, ESQ.

[PLATE XII]

THE bronze cista (Fig. 1), the principal decoration of which is reproduced on PLATE XII, belongs to the comparatively large class of monuments commonly known as Praenestine cistae from the fact that the great majority of them have been found at Palestrina (the ancient Praeneste), situated in the Sabine Hills, some twenty-three miles southeast of Rome.¹ All the known specimens have been found in tombs, where they were frequently used as receptacles for toilet articles of various sorts, such as mirrors, combs, sponges, and small boxes for cosmetics, and this was doubtless their principal use in actual life.² The cista which is here published was purchased by Mr. Loeb at the sale of the Sarti Collection in Rome in 1906.³

¹ Cf. on the Praenestine cistae in general Emm. Fernique, *Étude sur Préneste*, Paris, 1880, and art. 'Cista' in Daremberg et Saglio, *Dictionnaire des antiquités grecques et romaines*, I, pp. 1202-1205; K. Schumacher, *Eine pränestinische Ciste im Museum zu Karlsruhe*, Heidelberg, 1891; A. Mau, art. 'Cista' in Pauly-Wissowa, *Real-Encyclopädie der classischen Altertumswissenschaft*, III, cols. 2501-2606; F. Behn, *Die Ficoronicae Cista*, Rostock, 1907.

² Cf. Schoene, *Ann.* 1866, p. 194; Fernique, *Étude*, pp. 164 ff.

³ The cista is briefly described in the catalogue of the Sarti Collection, by Dr. L. Pollak (Tipografia dell' Unione Cooperativa Editrice, Rome, 1906). As this catalogue is undoubtedly little known in America (I have not been able to find a copy of it in the vicinity of Boston), I append Dr. Pollak's description, of which Mr. Loeb has very kindly sent me a copy:

"No. 99. Cista. Tre piedi di animale, sui quali un leone in assalto, portano la cista. La cista è provvista di catanelle (ora ne manca qualcuna) fisso ad otto bottoni nel cilindro. Il manico è formato dal gruppo di un satiro ed una bacchante (tutti e due nudi). Il cilindro è decorato colla rappresentanza incisa di una gigantomachia contornata sopra e sotto da fregi di palmette.

From November, 1906, to January, 1910, it was exhibited as a loan in the Fogg Art Museum of Harvard University. It is now in Mr. Loeb's collection in Munich, Germany.

The cista is one of the best preserved examples of its class. The surface has been injured in a few places, especially about the outer edge of the cover, where small pieces have been lost; five of the eight chains that were once attached to the body have disappeared; the feet and the figures on the cover have been secured by modern rivets; and the box has been strengthened by a modern lining at top and bottom. But no essential part is gone, and the surface is so well preserved that practically all of the incised decoration can be made out.

In form the cista presents no striking peculiarities. It consists, like most of the other specimens, of a roughly cylindrical box with a convex moulding at the bottom, provided with three feet and with a convex cover, to which is attached a handle in the form of two human figures.¹ The box was apparently beaten out from a single sheet of bronze; there are no traces of a seam, and the fact that the diameter is slightly less at the bottom than at the top — a not uncommon peculiarity — points

Minerva attacca verso destra colla lancia un gigante che getta un sasso contro di lei, vi è poi una giovane deità (Efesto?) coll' ascia e Poseidone col tridente contro un gigante giovane alato con due code da mostro marino il quale regge un albero (prototipo Skylla); Bacco sulla pantera che attacca col tiro un gigante caduto. Nel fondo sono sparse delle stelle. Sul coperchio due vittorie nude che portano tenie. Una ha scarpe basse; l'altra un braccialetto sul piede destro. Monili tutti e due.

NOTE. Disegno elegante del III. sec. av. Cr. Motivi greci ma lavoro latino-etrusco. Trovata a Palestrina. Rappresentanze della gigantomachia sono assai rare nell' arte etrusca. Cfr. Gerhard, *Etrusk. Spiegel*, IV, 1, Taf. 286, 1-3 e V, Taf. 55. (L'incisione di questo specchio trovato anche a Palestrina mostra la stessa mano come la cista.) Cfr. anche G. Körte, *Urne etrusche*, II, Tav. I, 1; Ia. Alto cm. 44, diametro cm. 23."

The photograph from which Figure 1 was made was taken by Mr. F. L. Collyer, of Cambridge, Mass.; the drawings for PLATE XII and Figure 2 were made by Mr. R. E. Jones, Assistant in Fine Arts in Harvard University, and carefully verified by Mr. Jones and myself. A brief account of the cista was given in a paper read at the General Meeting of the Archaeological Institute at Providence, R. I., in December, 1910; cf. *A.J.A.* XV, 1911, p. 60.

¹ The dimensions are: Total height, 44.8 cm. Height of body (including feet), 29.2 to 29.6 cm. Diameter (outside measurements) at top of body, 22.9 cm.; at bottom, 21.8 cm. Diameter (inside modern lining) at top of body, 22.1 cm.; at bottom, 20.2 cm. Diameter of cover, 23.5 cm.



FIGURE 1.—CISTA IN MR. LOEB'S COLLECTION.

in the same direction.¹ The feet, which were cast separately and attached, are modelled in imitation of lion's paws resting on round bases, with a convex moulding at top and bottom. At the top each foot widens out and assumes the form of a pair of Ionic volutes, connected by a narrow band decorated with an incised pattern of oblique hatching, and above this in each case is a crouching lion facing right, with wide open jaws and protruding tongue.² These lions present a decidedly archaic appearance; the mane and the hair along the back are represented by a narrow band in low relief, hatched with oblique incised lines, and the bush at the end of the tail is suggested by similar hatching. But this is only a pseudo-archaism, since the incised designs on the box and the cover show conclusively that the cista was made much later than the period of true archaism.

The handle consists of two nude standing figures, one male, the other female, each with one hand laid on the shoulder of the other, and with the other arm bent at the elbow, the hand resting on the hip.³ The modelling of the figures is fairly accurate, but summary and careless in details. The legs from the knee down are too long for the rest of the body (especially in the male figure), and the free leg in each case is longer than the other. Fingers and toes are only roughly separated by deep grooves. The hair is indicated by shallow grooves on the crown of the head, and by deeper grooves at front and back. The hair of the male figure rises in long locks above the forehead, that of the female figure is modelled as a roll which covers the ears. In the male figure the right ear is set too high and too far forward, and both ears are pointed at the top. All these details produce a pseudo-archaic effect similar to that

¹ Cf. for the same peculiarity, Fernique, *Étude*, p. 191, No. 106; *Not. Scav.* 1907, p. 482, Fig. 24. It is to this difference of diameter that the slight curvature in the drawing (PLATE XIII) is due.

² This type of foot is common on the Praenestine cistae, though the lions usually face left, not right; cf. Gerhard, *Etruskische Spiegel*, I, pl. V, 4 and pl. XV-XVI, 2; *Not. Scav.* 1907, p. 482, Fig. 24; *Bulletino d'Arte* III, 1900, p. 187, Fig. 19. On the technical peculiarities of the feet of Praenestine cistae and the inferences to be drawn from them as to the methods of ancient workers in bronze, cf. Pernice, *Jh. Oest. Arch.* I, VII, 1904, pp. 168 ff.

³ Cf. *Mon. dell' Inst.* VIII, pl. 58, and X, pl. 29; Gerhard, *Etr. Spiegel*, I, pl. 7; *British Museum Catalogue of Bronzes*, No. 645.

which we noted in the lions on the feet, and they are reasonably taken as indications that the handles, like the feet, were cast in an Etruscan workshop,¹ situated, perhaps, in southern Etruria, perhaps in Praeneste itself.² In several handle groups of this sort, the male figure has pointed ears and a tail, and so is clearly characterized as a satyr,³ but in our group, the pointed ear seems due to careless modelling rather than to intention.

About the body, at regular intervals, some seven centimetres from the top, are eight disks. Each of these originally carried a ring for the attachment of the chains which form a regular feature of this type of cistae. Seven of the rings are still in place, but of the chains only the three sections that appear in Figure 1 have been preserved. Each link is composed of two rings. In several places bits of iron are firmly rusted to the chain, — relics, no doubt, of other parts of the furniture of the tomb. The chains, as usual, were attached without regard to the incised decoration.

In all these details, the cista conforms closely to other examples. Much more interest attaches to the incised designs, with which, as is commonly the case, both cover and body are decorated. The design on the cover (Fig. 2) is simple. Inside

¹ Cf. Behn, *Die Ficoronische Cista*, p. 13.

² That there were Etruscan workshops in Praeneste is suggested by the fact that the inscriptions on mirrors found in the Praenestine tombs are sometimes in Latin, sometimes in Etruscan. On the strigils from the tombs, not only Latin and Etruscan, but also Greek inscriptions appear, so that it is possible that Greek workmen also settled in this Latin town. The inscriptions on the cistae are always in Latin. Cf. Fernique, *Étude*, pp. 163 ff.

On the basis of the inscription on the famous Ficoroni cista, *Novios Plautios med Romai fecid, Dindia Macolnia sileai dedit*, it has sometimes been argued (Jahn, *Die ficoronische Cista*, pp. 58 ff.; Jordan, *Kritische Beiträge zur Geschichte der lateinischen Sprache*, pp. 2 ff.; Gamurrini, *Röm. Mitt.* II, 1887, pp. 228 f.) that the cistae and the mirrors found at Praeneste were all made at Rome, but in view of the fact that the great majority of the known examples have been found at Praeneste, while not a single specimen has been discovered in Rome, the theory of local manufacture is much more probable. Cf. the remarks of Brizio, *Nuova Antologia*, XXIV, 1889, pp. 433 and 439, and Schumacher, pp. 25 f.

³ Cf. for instance, *Mon. dell' Inst.* VIII, pl. 58. It is for this reason, doubtless, that the handle is described by Pollak as "formato dal gruppo di un satiro ed una bacchante."

a wreath of laurel leaves,¹ on either side of the plate by which the handle was attached, is a winged female figure flying to left. The two figures are almost exactly alike. Each wears a necklace and bracelets and carries a long fillet in her hands.



FIGURE 2.—DESIGN ON THE COVER OF THE CISTA.

The only important difference between them is that one is provided with low shoes with wide tops, the other is barefoot, with only a broad anklet on the right leg. The type resembles the Greek type of flying Victory, especially as Nike is so commonly represented with a fillet in her hands. The Greek Nike, to be

¹ This pattern is of frequent occurrence on the covers of Praenestine cistae; cf. *Mon. dell' Inst.* VIII, pl. 58; Gerhard, *Etr. Spiegel*, I, pl. 7. It is very common, also, on Etruscan and Praenestine mirrors; cf. Gerhard, *Etr. Spiegel*, I, pl. 55, and *passim*.

sure, usually wears a long robe and is barefoot,¹ but on the South Italian vases she is occasionally represented undraped,² and not infrequently appears with shoes or sandals on her feet.³ On other cistae she is most often dressed in a robe,⁴ but sometimes appears undraped. On a cista in Berlin,⁵ two flying figures very similar to ours have only a bit of drapery over the left arm; and on the Ficoroni cista,⁶ which is the most splendid example of the class and is unquestionably based on a Greek model, a very similar Victory appears, undraped except for a narrow robe which is loosely thrown about her shoulders. On another example, the so-called Napoleon III cista,⁷ the same figure is represented riding on a dolphin, in combination with others which are plausibly interpreted by Brunn⁸ as Aphrodite and her train. It is possible, therefore, that the maker of our cista conceived these figures rather as Graces than as Victories, like the "Lasas" which occur so frequently on Etruscan mirrors, and are often represented in forms similar to these. On the whole, however, the interpretation as Victories seems to me more probable, and in any case the type was very surely affected by the Greek conception of Nike, especially by the types employed by the later Greek vase-painters of Southern Italy. The waves which are so carefully worked out on the Napoleon III cista are reduced on the Loeb cista and the specimen in Berlin to a simple irregular line.

With the interpretation of the figures which fill the principal field on the body of the cista (PLATE XII) there is, fortunately, no difficulty. The subject here is clearly a battle of the gods and the giants,—a subject, so far as I am aware, that does not appear on any other cista. Of the seven figures which make

¹ Cf. Knapp, *Nike in der Vasenmalerei*, p. 92; Lenormant and De Witte, *Élément Céramographique*, I, pl. 91 ff.

² Cf. Heydemann, *Die Vasensammlungen zu Neapel*, No. 3248; Laborde, *Coll. des vases grecs de M. le comte de Lamberg*, II, pl. 28.

³ Cf. the British Museum vases, F 178, F 430, F 464; *Ann. dell' Inst.* 1832, tav. d'agg. F.

⁴ Cf. *Mon. dell' Inst.* IX, pl. 24-25 and pl. 58-59; *ibid.* VI-VII, pl. 61-62.

⁵ *Arch. Zeit.* 1862, pp. 289-295, pl. CLXIV-CLXV.

⁶ Cf. *Wiener Vorlegeblätter*, 1889, pl. 12; and for the literature, Behn, *Die Ficorontische Cista*, p. 4.

⁷ *Mon. dell' Inst.* VI-VII, pl. 03.

⁸ *Ann. dell' Inst.* 1862, p. 14.

up the design, three are clearly characterized as Poseidon, Dionysus, and Athena, and of the four remaining figures, one is a winged giant of monstrous form with fish-tails in place of legs. The design is framed by borders of palmette pattern of two different forms: above, upright palmettes of the usual form alternate with reversed palmettes with incurving leaves;¹ below, the two forms are combined in such a way as to form a border of double palmettes which slope to the right.²

The figures of the gigantomachy fall into three groups. The most complicated (at the left on PLATE XII) represents the contest of Poseidon with the fish-tailed monster. The god, dressed only in a short robe which leaves the breast and the right arm uncovered and is wound about the left forearm, moves towards the right and thrusts at his opponent with his trident, which he grasps firmly in both hands. His antagonist draws back before the onslaught of the god, swinging above his head a branch, which is his only weapon. At the left a second giant, with a long robe thrown over his left arm and a baldric across his breast, aims a blow at Poseidon with a battle axe of the type which is commonly called a *sagaris*.³ Behind him a tree stump is summarily indicated, and beyond a shield lies on the ground. In the next group, which is separated from the first by an elaborate decorative star, Dionysus, sitting easily astride an enormous panther, threatens with his thyrsus a giant who lies prone before him and whom, on the authority of Apollodorus,⁴ we may perhaps call Eurytus, or possibly, on the authority of a single vase-painting, Eurymedon.⁵ The god is notably slender and effeminate, dressed in a sleeved chiton and Phrygian cap, with a robe loosely wound about his left arm and flying out behind. In his right hand he holds a short thyrsus, with his left he grasps the bridle of the panther, which is worked out in considerable detail. The fallen giant wears

¹ Cf. *Mon. dell' Inst.* X, pl. 45-46.

² Cf. for a similar pattern, Gerhard, *Etr. Spiegel*, I, pl. 6.

³ Pollak (see p. 465, note 1) describes this figure as "a youthful god (Hephaestus?), but the interpretation as a giant seems to me more probable.

⁴ I, 6, 2.

⁵ Cf. *B. C. H.* XX, 1896, pl. 7. Of the inscription only the letters ΜΕΔΟΝ are preserved, but the reading [Eury] medon proposed by Hartwig (*ibid.*, p. 367) is probably correct.

chlamys, baldric, and crested helmet. With his left hand he still holds his shield, his right rests weakly on the ground, and near it is the sword which has fallen from his grasp. Behind him a tree rises to the top of the field. Next in order comes Athena, who falls back towards the left and thrusts with a long spear at a youthful giant,—Enceladus, on the testimony both of the literature and the monuments.¹ Her dress, too, is elaborate, consisting of a long, overgirt chiton, aegis, helmet, and robe thrown over the left arm and flying out behind in long ends. She wears bracelets and carries her shield on her left arm. Her opponent, who wears chlamys, baldric, and helmet, has fallen on one knee, but holds above his head a great rock which he is about to hurl at his adversary. Between the two figures is a second decorative star.

In execution the design is like that of the great majority of the Praenestine cistae. In general the lines are hastily and carelessly incised, the whole effect is sketchy and incomplete. This is especially noticeable in the heads of the figures, which are sketched with comparatively few lines and with the marked tendency to realism that is characteristic of Italic art.² At the same time there are many indications that the artist drew his inspiration, directly or indirectly, from a Greek model. The subject is one of the commonest of Greek subjects from the period of the black-figured vases on, and Poseidon, Dionysus, and Athena are three of the four divinities (the fourth is, of course, Zeus) who appear most frequently on the vases, both in extended compositions and in single groups;³ the attributes of the gods and the dress of all the figures are Greek; and the types and many details find their closest parallels in Greek monuments. The Athena belongs to a type that goes back to the western pediment of the Parthenon and is found several

¹ Cf. Apollod. I, 6, 2; Paus. VIII, 47, 1; Mayer, *Giganten u. Titanen*, pp. 300 ff. In PLATE XII Athena and her opponent are separated, Athena appearing at the right end of the drawing, Enceladus at the left.

² Cf. Fernique, *Étude*, p. 154: "Bien souvent l'artiste a imité des figures grecques; cette intention est visible pour les graffites de la ciste Ficoroni et pour un certain nombre d'autres objets. Mais alors même que l'exécution est parfaite, il y a toujours dans les traits du visage une sorte de réalisme que l'on doit regarder comme un des caractères propres à l'art latin."

³ Cf. the lists in Mayer's *Giganten u. Titanen*, pp. 298 ff.

times in Greek representations of the gigantomachy.¹ The giant fallen on one knee is a commonplace on vases with scenes of this sort.² Dionysus riding on a panther does not occur, so far as I am aware, in Greek representations of the subject, though he is often accompanied by a panther, which aids him in subduing his antagonist, and on the splendid amphora from Melos in the Louvre,³ which dates from the latter part of the fifth century, he drives a chariot drawn by panthers. Dionysus riding on a panther, also, is common enough in representations of the Bacchic thiasos, especially on the South Italian vases.⁴ The giants on the black-figured and the severe red-figured vases are regularly represented as hoplites in helmet and shield fighting with the spear or the sword, like the opponent of Dionysus on the cista, but on the red-figured vases of fine style and later, they not infrequently fight with stones⁵ and branches⁶ like the opponents of Athena and Poseidon.

For many reasons, then, it is clear that the maker of the cista was dependent upon a Greek model for the main features of his design. The two giants in the group with Poseidon, however, differ from the ordinary Greek types of giants and demand a more detailed discussion. The *sagaris* is certainly not a usual weapon in the hands of the giants; I have not been able to find another example of its use.⁷ It is the weapon of the Amazons,

¹ Cf. the bronze relief from a mirror case in the Museo Kircheriano, publ. *J.H.S.* IV, 1883, pp. 90-95; and the South Italian volute crater St. Petersburg 523, publ. *Bull. Nap.* II, 1844, pl. 6. For examples of the type in other connections, cf. the list given by Smith, *J.H.S.*, i.e., p. 94.

² Cf. Louvre E 732, publ. *Mon. dell' Inst.* VI-VII, pl. 78 (black-figured amphora, attributed to a Coan painter by Kretschmer, *Vaseninschriften*, p. 59); British Museum E 469, publ. *Sextes Hallesches Winckelmannsprogramm* (red-figured severe); Bibl. Nat. 573, publ. Luynes, *Description de quelques vases peints*, pl. 19 (attrib. by Hartwig to Brygos); Berlin 2631, publ. *Wiener Vorlegeblätter*, I, pl. 5 (cyliz of Erginos and Aristophanes); Athens 1258, publ. 'Eph. 'Apx. 1883, pl. 7 (late red-figured, style of the amphora from Melos).

³ Furtwängler-Reichhold, *Gr. Vasenmalerei*, pl. 90-97; references to earlier discussions are given in the Text, II, p. 193, note 1.

⁴ Cf. Tischbein, *Collection of Engravings from Ancient Vases*, II, pl. 43.

⁵ Cf. British Museum E 443, publ. Gerhard, *Aus. Vas.*, pl. 64 (red-figured severe); Naples 2883, publ. *Mon. dell' Inst.* IX, pl. 6 (red-figured fine); British Museum F 237, publ. *Erstes Hallesches Winckelmannsprogramm* (Campanian style); St. Petersburg 523, publ. *Bull. Nap.* II, 1844, pl. 6 (South Italian).

⁶ Cf. the amphora from Melos, referred to in note 3 above.

and as such it constantly appears, especially on the South Italian vases, where the battle with the Amazons is a favorite subject.¹ Here, then, we seem to have a case of *contaminatio*, due either to the designer of the cista or to the Greek artist whose work he copied. Which of these alternatives is correct I see no means of determining. But the use of this peculiar form of battle axe gives us another hint as to the Greek origin of the design.²

The fish-tailed monster presents a more difficult problem. On the analogy of the vase-paintings, we may, perhaps, give the name Polybotes to Poseidon's opponent,³ though he certainly is very different from the giant who fights with Poseidon in the vase-paintings. Only the upper body to the groin is human; in place of legs he has two enormous fish tails, which end in trefoil forms. The juncture of the legs and the body is concealed by a sort of finny girdle, and to the back wings are attached. The only close parallel that I have found is on another Praenestine monument, a bronze mirror, now in Berlin (Fig. 3).⁴ Here a very similar figure is represented contending with Athena. Meyer⁵ regards this as a mere variant of the

¹ Cf. Furtwängler-Reichhold, Text, II, p. 144, Fig. 47 (Amazonomachia on the neck of the famous "Darius" vase, Naples 3253; for the earlier literature, see p. 142, note 1); *ibid.* p. 161, Fig. 58 (Amazonomachia on the neck of the "Medea" vase, Munich 810; for the earlier literature, see p. 161, note 1); *Bull. Nap.* II, 1854, pl. 4 (volute crater from Ruvo, Jatta Coll. 1096). In the gigantomachy on the amphora from Melos, one of the opponents of the gods wields a *sagaris*, but as the figure is surely feminine, it does not afford a parallel to the giant on the Loeb cista; for the various interpretations proposed for the female figure, cf. Furtwängler-Reichhold, Text, II, p. 197.

² Professor Fowler has suggested to me that in the Greek original this figure may have been a Hermes holding the caduceus, which the Latin engraver misunderstood and transformed into a *sagaris*. This seems to me possible, though I prefer the interpretation of the figure as a giant.

³ Cf. Apollod. I, 6, 2; black-figured amphora, Louvre E 732 (mentioned *supra*, p. 474, n. 2); red-figured cylix of Erginos and Aristophanes, Berlin, 2531, publ. Gerhard, *Trinkschalen u. Gefäße*, pl. 2. On a severe red-figured amphora in Vienna (Laborde, I, pl. 41; Millingen, *Ant. Uned. Mon.* I, pl. 7, 8; Lenormant and De Witte, *Él. Cér.* I, pl. 5), Poseidon's opponent is called Ephialtes, but this is an isolated case.

⁴ Gerhard, *Etr. Spiegel*, IV, pl. 286, 1. On the cista *Mon. dell' Inst. Suppl.* pl. 19-20, a male monster with two fish tails in place of legs, but without wings, is used as a purely decorative figure, together with sea-horses and dolphins.

⁵ *Giganten u. Titanen*, p. 348, n. 130.

common late type of giant with serpent legs, and his only comment is, "The fact that the serpent legs end in fish tails has no significance on an Etruscan monument," a remark which suggests that the writer did not consult the text of the *Etruskische Spiegel*, where the mirror is distinctly said to have come from Praeneste. That the artist's conception here, as on the cista, was affected by the common type of giant with serpent legs is probable, but I doubt very much if the legs in these examples were thought of as serpents. On the cista, at all events, each

leg is provided with a very definite fin, and the girdle which conceals the juncture of the legs with the body has a decidedly fishy look. We have to deal, then, with a fish-tailed giant, or rather, a giant with fish tails in place of legs, a type that does not appear, so far as I am aware, on any Greek monument. One is tempted to argue that the figure is simply an invention of the Praenestine engraver. The fondness of the Italic artists for winged figures is well known, and the fish tails may have been inspired by a desire to make Poseidon's opponent a sea monster. Against such an

FIGURE 3.—BRONZE MIRROR.
(Gerhard, *Etr. Spiegel*, IV, pl. 236, 1.)

assumption, however, several arguments may be urged. In the first place, the Greek parallels which I have cited for the other types create a presumption that this figure, which is the most carefully drawn of all, goes back to a Greek prototype; the original compositions of the Italian engravers, as we see them on the poorer cistae, are not nearly so well conceived. Secondly, though there are no exact Greek parallels, analogous figures are found on a number of late monuments. The Tritons and Scyllas that are so constantly used as decorative types on the South Italian vases are fish-tailed monsters, and show at least a fondness for such types among the Greek artists of this district. Both Triton and Scylla, to be sure, are usually represented on the vases with only a single



fish tail, but on many monuments of the Roman period, which it is reasonable to trace to earlier prototypes, Scylla, at least, appears with two fish tails in place of legs,¹ and on Etruscan mirrors, which again reflect Greek models, both Scylla² and a male monster of similar form are represented in this way (Fig. 4).³ Finally, the monster of our cista recalls the late Greek type of giant with serpent legs and wings, of which the most familiar examples are the giants on the great frieze from Pergamum, but which is found occasionally as early as the first years of the third century B.C., or even the last years of the fourth.⁴ For all these reasons, I am inclined to believe that our fish-legged monster reflects a Greek type which was invented late in the fourth century B.C., or early in the third (probably in Southern Italy), but which never attained the popularity of the serpent-legged form.

If these arguments are valid, we have on the cista a fairly faithful reproduction of a Greek representation of the battle of the gods and the giants dating, probably, from the end of the fourth or the beginning of the third century, B.C. That the design was copied from a South Italian vase seems likely from the parallels that I have quoted and also from a number of more general considerations. The style of the figures, so far as we can recover it in its Italic dress, is precisely the lax, decorative style of the South Italian vases,—the figures seem more like actors in a pageant than like contestants in a deadly



FIGURE 4.—BRONZE MIRROR.
(Gerhard, *Etr. Spiegel*, V, pl. 54.)

¹ Cf. the monuments collected by Vinet, *Ann. dell' Inst.* XV, 1843, pp. 144–205, *Mon. dell' Inst.* III, pl. 52 and 53.

² Cf. Gerhard, *Etr. Spiegel*, V, pl. 52, 53.

³ *Ibid.*, pl. 54.

⁴ Cf. Kuhnert in Roscher's *Lexicon der Myth.* I, col. 1065; Elizabeth M. Gardiner, *A.J.A.* XIII, 1900, pp. 318 ff.

struggle;¹ and the use of decorative trees and stars to fill awkward spaces is quite in the manner of the South Italian painters.² The cista itself must have been made some time after 300 B.C. We shall probably not be far wrong, if we date it about the middle of the third century, B.C.

This establishment of a *terminus post quem* for the Loeb cista is of some importance in view of the different opinions that have been advanced in regard to the date of the Praenestine cistae as a class. Most of these monuments, unfortunately, present little that is useful for determining their exact date, and the evidence of the graves in which they are found is not so helpful as could be desired. Almost the only evidence that is of value is found in the inscriptions scratched on a few of the cistae and on some of the mirrors found with them,³ together with the inscriptions on the stones which were set up over the graves,—the so-called *pigne* with their rectangular bases and other rectangular stones with cuttings for portrait busts.⁴ On the basis of the inscriptions on cistae and mirrors, and principally because the nominative of the second declension is usually written with the older form *os*, but sometimes with the latter form *us*, the whole class of cistae has usually been dated roughly in the third century B.C., though it has been recognized that a few examples may be slightly earlier or slightly later than this time.⁵ The inscriptions on the

¹ Cf. the figures of Greeks and Amazons on the neck of the "Darius vase" (see p. 475, n. 1); and the similar figures on the crater No. 3256 in the Naples museum, publ. *Mon. dell' Inst.* II, pl. 30-32. Many of these figures are very similar in pose to the contestants on the Loeb cista.

² Cf. for these details, the vases cited above, p. 475, note 1. Trees and other landscape details are very common on the Praenestine cistae; cf. Behn, *Die Ficoronicae Cista*, p. 48.

The South Italian vases are generally admitted to have furnished the models for the designs on the more carefully engraved cistae, whereas the more carelessly made specimens, in which the reflection of Greek prototypes is less evident, may have been inspired by vases made in Southern Etruria in imitation of the painted Attic vases; cf. Mau in *Pauly-Wissowa*, III, col. 2601; Schumacher, p. 25.

³ Cf. *C.I.L.* XIV, 4105-4112 (cistae); 4094-4104 (mirrors).

⁴ Cf. *C.I.L.* XIV, pp. 328 ff.

⁵ The change from *os* to *us* was made, apparently, towards the end of the third century B.C.; cf. Lindsay, *The Latin Language*, p. 234. The earliest monument on which the new orthography appears is probably the epitaph of

gravestones show a similar variation in orthography, and have commonly been assigned to the third and second centuries.¹ In recent years, however, an attempt has been made to assign an earlier date to the Praenestine cistae. In 1893, Furtwängler, in discussing an early class of South Italian vases, painted in imitation of fifth century Attic wares, remarked that the types on the Ficoroni cista "are derived from the same sources as those of the Argonaut pictures on early South Italian vases — viz. from the paintings of the Polygnotan circle. The cista must be of nearly the same date as the vases,"² a period which is defined in an earlier passage as the last decades of the fifth century.³ A similar statement appears in Furtwängler's *Antike Gemmen*, published in 1900, where the beginning of the manufacture of cistae at Praeneste is dated not later than about 400 B.C.;⁴ and later still we find the same critic arguing that the *good* Praenestine cistae betray the influence of the Sicyonian school of drawing in the fourth century,⁵ though in a footnote he modifies his earlier statements to some extent. Referring to *Antike Gemmen* III, he remarks: "On p. 189 I dated the Praenestine engravings somewhat too high; in any case they go down through the whole of the fourth century."⁶

L. Cornelius Scipio Barbatus, who was consul in 293 (*C.I.L.* I, 29, 30 = VI, 1284, 1285). This, however, as Ritschl long ago showed (cf. Ritschl, *Opuscula Philologica*, IV, pp. 222 ff.), is later than the epitaph of the son of Barbatus, who was consul in 259 (*C.I.L.* I, 32 = VI, 1287). Ritschl's date for the epitaph of Barbatus, "not later than 234 B.C.," has usually been accepted, but even this, perhaps, is too early. Wölfflin has argued that the epitaph should be dated later than 200 (cf. *Sitzb. Mün. Akad.* 1892, pp. 190 ff.). In any case, the forms in *us* were firmly established early in the second century; they are used consistently in the decree of L. Aemilius Paulus Macedonicus of the year 189 (*C.I.L.* II, 5041) and in the famous Senatus Consultum de Bacchanalibus of the year 186 (*C.I.L.* I, 196).

¹ Cf. Henzen, *Ann. dell' Inst.* 1855, pp. 79 ff.; Mommsen in *C.I.L.* I, p. 28; Fernique, p. 136; A. della Seta, *Boll. d'Arte* III, 1909, p. 194.

² Cf. Furtwängler, *Meisterwerke der gr. Plastik*, p. 152. I have quoted the passage from the English translation by Miss Sellers, *Masterpieces of Greek Sculpture*, p. 111.

³ Cf. *Meisterwerke*, p. 149; *Masterpieces*, p. 109.

⁴ "Nicht später als die Epoche um die Wende des 5ten und 4ten Jahrhunderts," *Ant. Gemmen*, III, p. 189.

⁵ Cf. Furtwängler-Reichhold, *Gr. Vasenmalerei*, Text II, p. 43.

⁶ "Sie gehen jedenfalls durch das ganze vierte Jahrhundert herab."

All these arguments, it is to be noted, are based simply on stylistic comparisons. More recently Behn has attempted to use the epigraphic evidence of the cistae and the mirrors to prove the earlier date proposed by Furtwängler.¹ His argument is as follows:

"The *terminus ante quem* which Mommsen fixed at about 300 B.C. for the Ficoroni cista by comparison with the epitaph of Barbatus must now be placed earlier; this can be done with the help of the other incised cistae (8) and mirrors (11). Since there is little stylistic development in the incised decoration, division into earlier and later groups is often possible only by means of the linguistic forms and the shapes of the letters. The mirror Gerhard 182 (*C.I.L.* XIV, 4099) is early, because of the *♀* (Jordan, *Krit. Beitr.*, p. 5), the mirror *Mon. dell' Inst.* IX, pl. 7, 2 (*C.I.L.* XIV, 4101; *Eph. Ep.* I, 23) is somewhat later because of the form, *Q*, of the same letter; among the latest are the cistae *Mon. dell' Inst.* IX, pl. 22-23 (*C.I.L.* XIV, 4108; *Eph. Ep.* I, 19) and *Suppl.* pl. 15-16 (*C.I.L.* XIV, 4109; *Eph. Ep.* I, 168 *a*) and the mirror Klügmann-Körte V, pl. 45 (*Mon. dell' Inst.* IX, pl. 29, 2; *C.I.L.* XIV, 4098; *Eph. Ep.* I, 24), which have the nominative in *us*. In this last group, the first cista has the forms 'Leces' for *leges* and 'Aememno' for *Agamemno*; it comes, therefore, from a period when *G* was still unknown and *C* was used for *tenuis* and *media*. This period can be determined. The Roman tradition that Appius Claudius as censor (312 B.C.) removed *Z* from the Roman alphabet must be interpreted to mean that inscriptions without *Z* from the time of Appius were known to the Roman grammarians. With the removal of *Z* the admission of *G* is exactly contemporary, since this takes the place of *Z* in the alphabet, while *X* and *Z*, when they were later readopted, were placed at the end of the alphabet. An enactment of Appius in regard to the official use and the place of the letter in the alphabet is conceivable (Jordan, pp. 155 ff.). This is important for the chronology of the cistae and mirrors. The cista *Mon. dell' Inst.* IX, pl. 22-23 is surely one of the very latest; almost the entire Latin development of bronze engraving, therefore, is carried back into the fourth century (cp.

¹ Behn, pp. 8 f.

Schumacher, *Praen. Ciste*, p. 37). At the beginning of the development, in respect to date and style, stands the Ficoroni cista, which on these grounds also can be placed only at the very beginning of the fourth century."

The weakness of Behn's argument lies in his assumption that the occurrence of C in "leces" and "Acmemno" necessarily dates the cista on which it occurs earlier than the year 312. It is probable, to be sure, though it is by no means certain, that the new letter G was introduced by Appius Claudius in 312, but the inscriptions show that for many years the old and the new forms were used concurrently and that G did not come into common use until long after the time of Appius.¹ The forms "leces" and "Acmemno," therefore, do not by any means prove that the cista in question was made in the fourth century, and the occurrence of the termination *us* (which Behn uses only to prove that this cista and the other on which it occurs belong to the latest examples of the class) is decidedly against so early a dating.

On the whole, then, the most probable theory is still the older one which regards the mass of the Praenestine cistae as products of the third century B.C., but admits that a few specimens may have been made in the last years of the fourth or the first years of the second century. This theory the Loeb cista tends to confirm, since this example, if the arguments I have advanced in regard to the origin of the fish-legged giant are valid, cannot be dated earlier than 300 B.C. and is probably to be assigned to a considerably later period, about the middle of the third century. Like the other monuments of its class, this cista gives us an interesting picture of the art of Latium at this time, an art dependent in the main on the decadent Greek art of the South Italian cities, but suggesting in its realistic tendencies the quality which is the most prominent characteristic of the later art of Rome.

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¹ Cf. the instances of "c pro g" cited in the Index to *C.I.L.* I (p. 601); Lindsay, *The Latin Language*, p. 7; Egbert, *Introduction to the Study of Latin Inscriptions*, p. 26. It is to be noted, also, that the new letter would come into use in a provincial town like Praeneste somewhat later than its introduction in Rome.

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TWO CORINTHIAN COPIES OF THE HEAD OF
THE ATHENA PARTHENOS¹

AMONG the lost masterpieces of Greek sculpture the colossal chryselephantine statue of Athena Parthenos with which Phidias crowned his life's work in 438 B.C.² holds a foremost place. Owing to the records of antiquity and the investigations of recent years,³ it is happily now one of the best known, since numerous copies inspired by its grandeur and perfection have come to light.⁴ There is still great uncertainty about the details and individual qualities, which copies of a great work of genius fail to reproduce; but the general appearance

¹ A portion of this paper was first presented at an open meeting of the American School of Classical Studies at Athens in March, 1910; and afterwards at the meeting of the Archaeological Institute of America in Providence, R.I., in December, 1910.

² Cf. Loeschcke, *Festschrift zum funfzigjährigen Jubiläum des Vereins von Altertumsfreunden im Rheinlande*, 1891, pp. 16 f. Paret also, *Röm. Mitt.* XXIV, 1909, pp. 271 f., concludes that the Athena Parthenos was completed some five years after the Zeus of Olympia. The last book on Greek sculpture favors the other view; cf. Richardson, *A History of Greek Sculpture*, p. 170.

³ For the literature on the Athena Parthenos, cf. Friederichs-Wolters, *Gipsabgüsse des Berliner Museums*, Nos. 406-468; Frazer, *Pausanias*, II, pp. 312 f.; Smith, *The Sculptures of the Parthenon*, No. 300 f., and the works cited in the list of copies at the end of this article. For the literary and inscriptional evidence, cf. Michaelis, *Der Parthenon und Arz Athenarum*, ed. iii, pp. 55-60, 97-98.

⁴ Cf. Furtwängler, 'Über Statuenkopien im Altertum' (*Abh. der k. bay. Akad.* I Cl. xx Bd. iii Abh. pp. 581 f.), p. 7: "Endlich wurden epochemachende Werke auch schon sehr bald nach ihrer Entstehung von den kleineren Kunstnachgebildet. Die Verfertiger von Votiven oder zierenden Metallreliefs, von Münzstempeln, von geschnittenen Steinen und selbst die Vasenmaler haben berühmte plastische Werke benutzt und mehr oder weniger frei nachgebildet. Dasjenige antike Werk das wol den mächtigsten Einfluss dieser Art ausgeübt hat ist die Athena Parthenos des Phidias. Sie hat einen überaus vielfachen Nachklang in Werken aller Art gefunden. Ihr Kopf ward schon früh auf Goldreliefs in Südrussland frei nachgebildet; er hat zahlreichen Münzstempelschneidern vorgeschwobt," etc.

of the whole statue and its essential features are clear. They are given best and most faithfully by the statuette found near the Varvakion gymnasium in 1880, and now in the National Museum in Athens. Yet as a much reduced¹ and rather inartistic and unimaginative copy of the time of Hadrian it can afford little for the reconstruction of the type of the Phidian head, especially since casts probably were not made of chrys-elephantine colossi.² Here the virgin daughter of Zeus stands calmly and proudly as the victorious and armed but peaceful and protecting goddess of her people, with the figure of Victory resting on her outstretched right hand, while the left holds the edge of the shield under which coils the snake of the acropolis, guardian of Erechtheus, Athena's *oikouros ὄφις*, who in Pausanias (I, 24) becomes identical with Erechthonius. She wears the aegis over her breast, and on her head the Attic helmet with upturned cheek-pieces, surmounted by three crests which are supported by a sphinx in the middle and a winged Pegasus on either side. Other statues and statuettes³ also copy the entire figure, such as the Lenormant and Madrid statuettes, the colossal statue of Antiochus in Rome, the "Minerve au collier" in the Louvre, the well-preserved colossal copy from Pergamum in Berlin with Pergamene characteristics and many features of the original omitted or changed, the torso in Patras, the Museum of the Acropolis, the Palace of the Conservatori, the Villa Borghese and Villa Wolkonsky in Rome, and the Somzée collection. But for the reconstruction of the head with its luxuriantly decorated helmet we have, besides

¹ For the size of the Athena Parthenos, cf. *A.J.A.* 1896, pp. 335 f. The Varvakion statuette is about one-eleventh the size of the original, the gold medallions one thirty-fifth, the Aspasia gem, $\frac{1}{32}$, the copy from Pergamum, however, three-eighths. Some idea of how the colossal figure of Athena looked may be had from Amelung's clever reconstruction of a colossal Athena by Phidias from the colossal Medici torso in Paris and a Phidian head in Vienna (casts in Munich, Bonn, and elsewhere); cf. *Jh. Oest. Arch.* I. XI, 1908, p. 180, Fig. 71.

² Reinach thinks that in ancient times casts only of bronze statues were made, because marble statues were colored. It is more likely that casts were also made of marble statues without damaging the color or paint, but not of colossal figures. Cf. Reinach, *Académie des inscriptions et belles lettres, Comptes rendus*, 1900, pp. 535 f.; and for arguments against Reinach, cf. Pollak, *Jh. Oest. Arch.* I. IV, 1901, p. 145.

³ For complete list of copies and references, cf. below.

the meagre description of Pausanias, several marble heads in Athens, Florence, Verona, Paris, Copenhagen, Dresden, Cologne, one in Berlin whose main value consists in the traces of color which it still preserves, and a small bronze head from Carnuntum in Vienna. We have also a large number of gems and glass pastes and coins, terra-cotta disks in St. Petersburg, London, Berlin, and Paris; and medallions on gutti or askoi in Munich, London, and Berlin, and on a canteen in Gotha. The head is also represented on necklaces, fibulae, and gold disks, but above all on the Augustan gem of red jasper in Vienna, which is the best reproduction of the head in profile, both for details and artistically,¹ and on the two gold medallions from Kul Oba near Kertch now in the Hermitage of St. Petersburg, dating from the end of the fifth or beginning of the fourth century B.C.

To these copies of the head of the type of the Athena Parthenos the American excavations at Corinth have added another in the shape of a mould,² which represents *en face* the head and bust of Athena. Only one other terra-cotta mould of the head of Athena Parthenos is known, namely, that which passed from the collection of Julien Gréau into the Berlin Museum³ (now exhibited along with a cast in the last vase room, XIV, in the Old Museum). The mould in Berlin comes from Asia Minor, and represents the head in profile to left. But unfortunately it is much broken to the left, and the face is entirely lacking, only the back part and left side of the helmet and head appearing. The mould from Corinth (Fig. 1), on the other hand,

¹ It is easier to agree with Loeschke, Von Schneider, Furtwängler, and others than with Pollak, *Jh. Oest. Arch.* I, IV, 1901, p. 147, who thinks the gem of Aspasius is "verweichlicht flau."

² Terra-cotta moulds exist in many museums; cf. *Catalogue of the Terra-cottas in the British Museum*, E 1-92; Martha, *Catalogue des figurines en terre cuite du Musée d'Athènes*, pp. 36 f.; Walters, *History of Ancient Pottery*, I, pp. 115 f., pl. v; cf. for moulds from Girgenti, *Röm. Mitt.* XII, 1897, pp. 253 f.; cf. Mendel, *Catalogue des Figurines Grecques de Terre Cuite, Constantinople*, Nos. 1801, 1880, 1900-1942, 1950, 2268; Edgar, *Greek Moulds (Cat. du Mus. du Caire)*; Blümner, *Technologie und Terminologie*, II, pp. 126 f.; cf. Dio Chrysostom, *Or. LX*, p. 580 M: καὶ γὰρ ἔκεινοι (οἱ κορωπλάθοι) τένον τινὰ παρέχοντες ὅτοιον ἀντηλὸν εἰς τοῦτον ἐμβάλωσιν δημοσίου τῷ τύπῳ τὸ εἶδος ἀποτελοῦσι. Other Greek words for a mould are ἐκτύπωμα, τύπωμα, ἐκμαγεῖον; cf. Pollux, IX, 130.

³ Cf. for references, list of copies D (d) (3).

though less broad and not so long, is in almost perfect preservation. Corinth was an important centre for the making of terra-cottas,¹ and perhaps moulds were invented there, if we interpret Pliny, *Nat. Hist.* XXXV, 151, with Blümner (*op. cit.* II, p. 129) as meaning that Butades of Sicyon first made a terra-cotta mould at Corinth and an impression from it. Our mould is of buff clay, which contrasts with the dark red color of the Berlin specimen, and is probably of Corinthian origin. It was found in the year 1908 in a trench dug with the aid of money generously donated by Mrs. Howes, of Brookline near Boston, in a stratum of filling under the seats of the cavea of the Greek theatre,² from which have come many other terra-cottas dating from the sixth to the fourth century B.C. Perhaps casts from the Corinthian mould were used as votive offerings in the neighboring temple of Athena Chalinitis,³



FIGURE 1.—TERRA-COTTA MOULD FROM CORINTH.
Perhaps casts from the Corinthian mould were used as votive offerings in the neighboring temple of Athena Chalinitis,³

¹ Cf. *A.J.A.* II, 1898, pp. 206 f. ; X, 1906, pp. 159 f., for other terra-cottas found at Corinth.

² Cf. *A.J.A.* I, 1897, pp. 481 f., on the theatre. Subsequent excavations in the theatre have not yet been published.

³ Cf. Paus. II, 4, 5: τὸ δὲ λεπόν τῆς Ἀθηνᾶς τῆς Χαλινίτιδος πρὸς τῷ θεάτρῳ σφίσιν δοτίν.

where such dedications, representing on the helmet of Athena the winged Pegasus whom she had bridled, would be especially appropriate. The oval shape



FIGURE 2.—CAST FROM MOULD. FRONT VIEW.

from there to top of crest of sphinx 0.05 m. The breadth of the face is 0.025 m.

¹ Cf. *Jb. Arch.* I. XIV, 1800, pp. 120 f.; *Ath. Mitt.* XXVI, 1901, pl. xv (middle).

² Cf. Furtwängler, *Sitzb. der k. bay. Akad.* 1905, II, pp. 245 f., pl. i.

³ This was perhaps also the case with the terra-cotta mould of somewhat similar shape, which also has a high crest, which otherwise would be rather meaningless, published in *'Eph. 'Apx.* 1904, col. 72, Fig. 8.

is somewhat like that of some of the votive terra-cotta shields of the Hellenistic period found in a tomb at Eretria and now in Athens, Berlin, and Boston,¹ or perhaps a better parallel for the shape is a mould in Chicago with the figure of a Victory.² Possibly the crest of the sphinx was in such high relief in order that the votive offering might be pierced there for suspension.³ The height of the mould is 0.165 m., the greatest width 0.08 m., the thickness 0.035 m. The greatest height of relief is 0.02 m. The crest of the sphinx is 0.01 m. in relief at the top. In the cast (Fig. 2) the distance from the chin to the lower edge is 0.15 m., from the top of the triangular projection upward from the middle of the forehead-piece of the helmet (*μέτωπον*) to the chin 0.035 m.,

The head of Athena is here represented in full front view, even more so than on the gold medallions from Kertch. Whereas in most other copies a wider form of aegis occurs, in the Corinthian mould Athena wears a narrow aegis¹ with several whole snakes to form the trimming of the edge. The scallops of the older aegis are imitated by the winding of the snakes and by making them curl about one another. In the middle is the Gorgon's head, or head of Medusa of archaic type, with broad face, high cheek bones, bulging eyes, flat nose, and low forehead and archaic wavy hair with a snake at least on left side (right side in the cast). The preservation of the mould is not good enough to enable us to say with certainty that there was a similar snake on the other side of the hair. The snake seems to continue the hair downward past the ear, and not to issue from the Gorgon's ear as in the torso in the Villa Borghese. Two snakes' tails also appear as a kind of pendant below the Gorgoneion. Traces of these are found in most copies, especially in the statue of Antiochus and the "Minerve au collier." In the statues in the Villa Wolkonsky and in the palace of the Conservatori they are very small, as in the Corinthian mould. This was probably a feature of the original, where the tails of the two central snakes of the lower edge of the aegis turned up on either side of the Gorgoneion. The position of the Gorgon's head, somewhat higher than the extreme lower edge of the aegis, is due to the shape of the mould, where it would be inconvenient to put the Gorgon's head so near the edge, rather than to a late date, when the Gorgoneion is placed high up near the neck and is widely separated from the bottom, as in most copies except that from Patras. The surface of the aegis is left plain, as in the copies from Patras and elsewhere, but possibly the scales were indicated in color by the coroplast. In any case, the whole effect of the aegis is that of a mass of twisting snakes, which forms a striking contrast to the calm and dignified face of the goddess. Above the aegis, which sweeps down in two curves to a V-shape²

¹ For the narrow aegis, which occurs also in the statuette in Patras, cf. *B.S.A.* III, 1896-97, p. 128.

² As in *J.H.S.* XV, pl. v, which, however, is not a free rendering of the Athena Parthenos, as is there suggested. Also in Furtwängler-Reichhold, *Gr. Vasenmalerei*, pl. 20, and elsewhere.

between the breasts, we see the top of the chiton, with an indication of the characteristic V-shaped fold in the middle, which we meet in many other copies. But here we have more space between the two. On the neck we see the necklace, which occurs with more detail on the gem of Aspasia, the gold medallions, the askoi in Munich, the canteen in Gotha, the terra-cotta disks in St. Petersburg, on coins and fibulae, and especially on the "Minerve au collier."¹ In all of these except the last the necklace is placed too high, owing to the adaptation to the circular field, but the form of the Corinthian mould gives a better opportunity for exact proportions and for the proper position of the necklace. Many have thought it was not a part of the original. But, as was already the opinion of Lenormant,² contrary to Beulé, and as Schreiber, Arndt,³ Michon,⁴ and others believe, the necklace is a detail of the original faithfully preserved in the colossal "Minerve au collier." It is missing in the colossal copy from Pergamum, but that is not faithful to its origin, and has been altered much to suit the Pergamene taste. Whether the necklace in the statue of Phidias was a single string of beads, as in the "Minerve au collier," or beads with pendants or double, as on the Munich askos, or triple, as on the canteen in Gotha,⁵ it is impossible to decide definitely; but since the gem of Aspasia and the gold medallions also have a triple necklace of beads and pendants, it is perhaps more likely that the original necklace had more than one row.⁶ The broad and long expanse of the neck was probably also a characteristic of the original colossal statue, which the Corinthian mould, as the "Minerve au collier" and the Pergamene copy, reproduces more faithfully than the round medallions, since their shape would not allow so much space for the neck.

The features of the face, which looks into the distance, as

¹ Cf., for references, list of copies below.

² Cf. *Gaz. des Beaux Arts*, VIII, 1800, p. 221.

³ Cf. Brunn-Bruckmann, *Denkmäler Gr. und Röm. Sculptur*, text to pl. 512, p. 160 note.

⁴ Cf. *Mon. Piot*, VII, 1900, p. 160.

⁵ Cf. *Ath. Mitt.* XXXIII, 1908, pp. 133 f.

⁶ The necklace may also be seen on Athena on a vase from the fifth century in the style of Midias; cf. Furtwängler-Reichhold, *op. cit.* pl. 30.

must have been the case in the colossal statue of Phidias, reproduce better than the gold medallions those of the original, and are more Phidian than those of the Varvakion statuette. They are not so excessively broad, massive, heavy, plump, and dull as in the medallions, which are probably Ionic or barbarian work showing Attic influence rather than genuine Attic art.¹ Even in the Varvakion statuette the face is somewhat heavy and lifeless, but in the Corinthian mould it is rather pleasant, sympathetic, and friendly, though at the same time austere and dignified. The face is only moderately broad, with fairly full cheeks and cheerful look, contrasting with the narrow, rather short, oval face with severe expression which many attribute to the Lemnian Athena.² The expression is singularly attractive and comes nearer than most copies to reproducing that of the original statue, in this respect showing a great improvement over the Varvakion statuette. Even the profile (Fig. 3) compares favorably with the gem of Aspasia. The proportions are about the same as those given by Winter (*Jb. Arch.* I. 1887, pp. 225 f.) as characteristic of the Attic School. The chin is round and small, the mouth finely cut with full but delicately formed upper and lower lips, which are not so much parted as in the Varvakion statuette. The nose is moderately broad and long, forming a continuous line with the forehead. The transition from the nose, with its wide nostrils, to the cheeks is well modelled. The eyes are wide open and round, a feature which, as the much fuller form of the lower face, is common to most other copies; and the lower eyelids are not undercut. Here is a great contrast to the almond-shaped eyes with unusually sharp-cut eyebrows of the head in Copenhagen,

¹ Cf. Furtwängler, *Goldfund von Vetttersfelde*, pp. 47 f.; Hauser, *Neuattische Reliefs*, p. 126, 1; Furtwängler (*Meisterwerke*, p. 21, and *Statuenkopieen*, l.c., p. 8) thinks the gold medallions are not good copies. Collignon, *Hist. de la sculpture grecque*, p. 544, and Fowler-Wheeler, *Greek Archaeology*, p. 350, think they are Attic. So also Kieseritzky, *Ath. Mitt.* VIII, 1883, pp. 291 f. But Loeschke, *op. cit.* pp. 3 f., and Pagenstecher, *Ath. Mitt.* XXXIII, 1908, p. 116, think they are Ionic.

² Cf. Jamot, 'L'Athéna Lemnia de Phidias,' *R. Arch.* 1895², p. 24, who thus characterizes the manner of Phidias: "l'ovale du visage plutôt court, aussi large en bas qu'en haut, les yeux écartés, le nez fort et court, formant une ligne droite avec le front, la bouche aux lèvres charnues entr'ouvertes, les mâchoires puissantes."

where, as Pollak¹ says, "alle Kraft ist in der Augen- und Stirnpartie concentrirt." But the Corinthian copy is more loyal to its Phidian original in making the whole face beautiful and not subordinating one part to another. The cheeks are not so full and the face not so round as in the Varvakion statuette, and yet there is much resemblance between the two faces, the Corinthian being nearer to the original.



FIGURE 3.—CAST FROM MOULD.
PROFILE.

respect, too, the Corinthian. From the ears, which are not visible, hang double pendants

¹ Cf. *Jh. Oest. Arch.* I. IV, 1901, p. 148.

² Cf. *Ath. Mitt.* VIII, 1883, pp. 305 f.

³ *Ibid.* XXXIII, 1908, p. 130.

or earrings ending in circles as in the gem of Aspasia, the gold medallions, the askos in Munich, etc. The helmet which Athena here wears is of the usual Attic form elaborated by Phidias.¹ The movable cheek-pieces are, however, too low, and are more correctly given in the gem of Aspasia, the Varvakion statuette, and elsewhere. They almost take the place of ears, which are not represented at all. In fact, the features of the helmet resemble closely those of the guttus in Berlin pictured by Pagenstecher, *Die Calenische Relief-keramik*, pl. xxi, No. 166 a, though the sphinx there is not winged and there is no high crest. In this guttus, as in the gold medallions, the ears are omitted because no room is left for them by the lowness of the cheek-pieces. In the gem of Aspasia and in other gems, in the gold and terra-cotta medallions of St. Petersburg, on Attic tetradrachms, on the Gotha canteen, on the askos in Munich, on the heads in Berlin, Cologne, and Paris, these cheek-pieces are decorated with griffins in relief,² and possibly in the case of impressions from the Corinthian mould they were painted, although this detail might easily be omitted, and probably was, as in the Varvakion statuette. Certainly there were griffins in the original, as we know from the words of Pausanias, I, 24, 5: *κάθ' ἐκάπερον δὲ τοῦ κράνους γρῦπτες εἰσιν ἐπειργασμένοι*, which Kieseritzky³ rightly interpreted as relief-work on the cheek-pieces⁴ on either side of the helmet and not of the sphinx, as many have thought. The only variants are the fragment of a mould from Asia Minor, where Loeschcke⁵ has distinguished a male standing figure representing probably Heracles with the cornucopia, or rather, as Furtwängler⁶ thinks, a mystic with a bundle of twigs; and the marble medallion from Corinth which is published in this

¹ The best discussion of the helmet is by Loeschcke, *op. cit.* pp. 7 f. For the decoration on the back and the sides of the helmet; cf. also *Mon. Piot*, VII, 1900, pp. 167 f.

² Loeschcke was the first to distinguish two types, and to decide in favor of the type with one rear paw lifted higher than the other. Cf. Loeschcke, *op. cit.* pp. 18 f. This is the type on the heads in Paris, Cologne, and Berlin.

³ Cf. *Ath. Mitt.* VIII, 1883, pp. 299 f.; Frazer, *Pausanias*, II, p. 316.

⁴ Griffins occur on the cheek-pieces of the helmet of Athena on a vase in the style of Midias; cf. Furtwängler-Reichhold, *Gr. Vasenmalerei*, pl. 20.

⁵ *Op. cit.* pp. 12, 13; and *Dorpater Program*, 1886, p. 11.

⁶ *Arch. Anz.* VII, 1892, p. 106.

article. The forehead, piece or *μέτωπον* (cf. Pollux) of the helmet is not straight as in the gem of Aspasius and the gold medallions, but is curved to be parallel with the eyebrows as in the head from Carnuntum, and has a triangular projection in the middle above and below. This is lacking in the gem of Aspasius, the gold medallions, and in some other copies, but occurs at least downward toward the nose in the Varvakion statuette, the statue of Antiochus, the statuette in Madrid, the "Minerve au collier," the copy from Pergamum, in the heads at Berlin, Athens, Cologne, Copenhagen, Florence, Paris, that from Carnuntum, the one in the possession of Professor Pollak, in the marble medallion from Corinth, on coins, gems, gutti, and other works of the minor arts.¹ This feature, then, was in all probability a characteristic of the original, as Loeschke,² Furtwängler,³ Pollak,⁴ Von Schneider,⁵ and others have argued. The two new Corinthian copies make the argument still stronger against Kieseritzky,⁶ and counteract the recent compromise of Pagenstecher.⁷ The decoration which occurs on the *μέτωπον* of the helmet in the gold medallions, in the bronze head from Carnuntum, and in the marble medallion from Corinth, and elsewhere, was another feature of the original, which is lacking in the Corinthian mould. On the middle of the helmet is a winged sphinx with her fore paws stretched out in front of her, and a very high crest above her head. The sphinx was in

¹ Cf. list of copies. For an example on coins, cf. Lermann, *Athenatypen auf griechischen Münzen*, pl. ii, 5. For the gutti, cf. D (e) (3) and (4) = Pagenstecher, *Die Calenische Relief-keramik*, pl. xxi, Nos. 165, 166 a. So there are exceptions to Michon's statement in *Mon. Piot*, VII, 1900, p. 167, that "les petits monuments montrent le fronton coupé droit, les autres indiquent un écu triangulaire terminé par une pointe qui s'avance entre les deux yeux."

² *Op. cit.* pp. 7 f.

³ *Ath. Mitt.* VI, 1881, pp. 188 f.

⁴ *Jh. Oest. Arch.* I. IV, 1901, pp. 148 f.

⁵ *Ibid.* VII, 1904, p. 153.

⁶ *Ath. Mitt.* VIII, 1883, p. 303 f.

⁷ *Ath. Mitt.* XXXIII, 1908, pp. 130-131. Pagenstecher would adopt a form between the two, but thinks the right type is given by the gold medallions and the askos in Munich, which have practically no projection of the forehead-piece downward. His statement that the minor arts give only what is in the original might equally well be applied to the Corinthian mould of Hellenistic date as to the askos in Munich. Nor is this form of helmet post-Phidian, since it occurs on vases in the style of Midias which are influenced by the Athena Parthenos; cf. Furtwängler-Reichhold, *Gr. Vasenmalerei*, pls. 20 and 30; cf. also Pagenstecher, *l.c.* p. 131 note.

the original, as we know from Pausanias, I, 24, 5, who says: *μέσῳ μὲν οὖν ἐπίκειται οἱ τῷ κράνει Σφιγγὸς εἰκόνων*. But whether the wings were so large as they are in the Corinthian mould is doubtful. This was perhaps a device of the coroplast to fill the vacant space above. However, we are confirmed in the belief that in the original statue the sphinx was winged, and with her crest reached a greater height than that of the face itself. Nearly the same proportion exists in the Varvakion statuette, but the wings there are not nearly as high. Here, again, the shape of the Corinthian mould gives a better chance for the correct rendering of the crested and winged sphinx than the round medallions, which were obliged to minimize the crest and wings. The sphinx exists in nearly every well-preserved copy of the head,¹ and is in some copies the only ornament of the helmet.² Sometimes even the wings have been omitted as in the bronze head from Carnuntum,³ where the omission is due to a desire not to complicate the casting of the bronze. In the case of the head in Cologne,⁴ the wings were set in separate pieces, and that was probably done in the original statue. The other two crests were supported by winged Pegasi,⁵ which are to be seen also in the gem of Aspasia, the gold medallions, on the askoi and canteen, the mould from Asia Minor, the Varvakion statuette, the heads in Berlin, Cologne, Copenhagen, Paris, that from Carnuntum, and elsewhere. These crests, however, in the original as here, and in the Varvakion statuette and elsewhere, were not nearly so high as the central one over the sphinx. The Pegasi were parallel with the sphinx, and their fore legs were on the helmet and not flying free in the air as they do in the Varvakion statuette, the head in the Louvre, the gem of Aspasia, the Munich medallion, etc.⁶

¹ For exceptions, cf. the copy from Pergamum and the marble medallion from Corinth; cf. below.

² As in the head from Southern Italy, cf. below B 21.

³ *Jh. Oest. Arch.* I. VII, 1904, p. 152.

⁴ Loeschke, *op. cit.*

⁵ It is surprising to find even in recent articles such as that on Minerva in Daremberg et Saglio, *Dictionnaire*, p. 1927, and elsewhere, the statement that the sphinx was flanked by griffins. Cf. below, pp. 497 f.

⁶ Cf. Kieseritzky, *Ath. Mitt.* VIII, 1883, p. 303; Pagenstecher, *Ath. Mitt.* XXXIII, 1908, p. 120.

But in the Corinthian mould they are placed in profile with their heads toward the sphinx, just as in the *guttus* in Berlin. Only the head and breast and one of the fore legs appear. The crests above the small wings are curved round to follow the contour of the mould. This cramped position of the *Pegasi* is due to the shape of the mould, and does not reproduce correctly the original, in which the winged horses¹ were, as has been said, whole figures in the round, facing forward, possibly with the head turned to one side. The fore parts of horses or other animals which decorated the original helmet just above the forehead-piece, and whose fore legs probably projected over the *μέτωπον*,² are entirely omitted in our mould; but some idea of their appearance can be had from the gem of Aspasius, the medallions, coins, the "Minerve au collier," the heads in Paris, Copenhagen, Berlin, etc.³ Nor is there an owl in our mould, as on the gold medallions in St. Petersburg, where perhaps it is only a sort of trademark or emblem to help the barbarians, for whom these medallions were made, to interpret them. It is very doubtful whether there was any owl connected with the Athena Parthenos, though we know definitely that there was an owl on the acropolis (*γλαῦξ ἐν πόλει*) connected with some statue of Athena, perhaps placed near the old xoanon by Phidias, and there seems also to have been an owl beside the colossal statue of Athena by Phidias which Amelung has reconstructed.⁴

To assign a date to a copy of a great statue, and especially to a terra-cotta copy of the head, is very difficult. That the Corin-

¹ Cf. Pagenstecher, *Die Calenische Relief-keramik*, pl. xxi, No. 106 a. Cf. also Furtwängler-Reichhold, *Gr. Vasenmalerei*, pl. 30, and p. 142.

² Cf. *Mon. Piot*, VII, 1900, p. 168.

³ Cf. *Mon. Piot*, VII, 1900, pp. 168-170, and the literature cited *l.c.*, p. 169, note 2, for the different opinions about the nature of the animals represented. Beulé, *L'Acropole d'Athènes*, II, p. 185, and Hauvette, *B.C.H.* V, 1881, p. 57, thought these were not in the original, because not mentioned by Pausanias. But Pausanias often omits details.

⁴ Cf. *Jh. Oest. Arch.* I. XI, 1908, pp. 160 f., especially pp. 190-194, Figs. 65-67, 71. On the owl; cf. also Furtwängler, *Jb. Arch.* I. IV, 1889, pp. 46 f.; Frickenhaus, *Ath. Mitt.* XXXIII, 1908, pp. 23 f.; Pagenstecher, *Ath. Mitt.* XXXIII, 1908, pp. 118 f.; Pottier, *B.C.H.* 1908, pp. 534 f.; Murray, *Sculptures of the Parthenon*, pp. 135 f., but cf. D (a) (3), below; Nicole, *Le procès de Phidias dans les chroniques d'Apollodore*, thinks the owl of Phidias was dedicated soon after 440 B.C. So also Frickenhaus, soon after 438 B.C.

thian mould is Greek work no one will deny, and it seems highly probable that it dates from the Hellenistic period, when statues such as the Venus Genetrix, the Diadumenus, the Spinario, the Boy with the Goose, the Heracles of Lysippus, and the Aphrodite of Melos were imitated in terra-cotta.¹ The large breadth and luxuriance of style, the narrow aegis, the features of the face and head, the resemblance of the Pegasi to those on the guttus in Berlin dating shortly after 300 B.C.,² the shape of the mould, and the place of finding beneath the Greek theatre, all point to the Hellenistic Age, from which date also the marble reliefs representing a gigantomachia which were likewise found in the theatre.³ The Corinthian mould, then, is a welcome addition to the long list of copies, because it will take its place along with the gem of Aspasia and the gold medallions as giving some faint reflection of the original masterpiece. I am inclined to rank it higher artistically than the askos in Munich, about which Pagenstecher⁴ waxes so enthusiastic. But we must remember that, as Loeschke (*op. cit.*) said, "wir besitzen kein Werk das von den Gesichtszügen der Parthenos ein wirklich treues zuverlässiges und ausreichendes Abbild gäbe."

It is convenient to publish here (Figs. 4, 5) another copy of the head of the type of the Athena Parthenos, which has been found also in the American excavations which Mr. Hill is conducting at Corinth. This is a Roman marble medallion which was discovered June 27, 1907. It is numbered 821 in the records of the excavations, and the entry in the inventory states that it was found in Roman shop 15,⁵ one metre above hard-pan in the repaired front wall. The length of the slab is

¹ Cf. Fowler-Wheeler, *Greek Archaeology*, pp. 314 f.; for Diadumenus, *J.H.S.* VI, p. 243; for adaptation in terra-cotta of the Aphrodite of Melos, cf. 'Εφ. 'Αρχ. 1908, p. 135.

² Cf. below, D (e) (3), the face of which, however, is lifeless and uninteresting and much inferior to that of the Corinthian mould.

³ Cf. *A.J.A.* XIII, 1909, pp. 304 f.

⁴ *Ath. Mitt.* XXXIII, 1908, pp. 113 f.

⁵ "Roman shop 15" is the number of one of the east shops facing the road to Lechaeum. This entry, however, is wrong, since Dr. Elderkin, formerly secretary of the American School in Athens, who was present at the time, informs me that the relief was found in one of the shops west of the *Boudroumi*.

0.43 m., the breadth 0.37 m., and the thickness 0.02 m. to 0.045 m. The length of the relief itself is 0.41 m., the breadth 0.298 m. The thickness above the surface of the slab is 0.013 m. to 0.03 m. The height of the head from the bottom of the chin to the base of the helmet above the forehead is 0.145 m. The



FIGURE 4.—MARBLE RELIEF FROM CORINTH. FRONT VIEW.

height of the forehead is 0.032 m., of the nose 0.045 m. The length of the eyeball is 0.03 m., the length of the eye to the outer edge of the eyelids 0.034 m. The height of the crest from the top of the helmet to the top of the crest is 0.104 m., the height of the helmet from the top of the forehead to the top of the crest 0.274 m. This copy is very free, and the technique betrays the lifelessness and coldness which characterize the Varvakion statuette and other Roman reproductions of the

head; and yet the round chin, the full but slightly parted lips, the long, straight nose, the large surface of the cheeks, the eyes with their distant, dreamy look, the curve of the sharp-cut eyebrows, the downward projection of the forehead-piece of the helmet, the decoration thereon, the high crest, and above all the cheerful but dignified expression of the broad face make it a rather interesting and pleasing adaptation of the head of Athena Parthenos. There can be no doubt that the Athena Parthenos furnished the inspiration for the Corinthian relief, but several features have been altered. Perhaps most noticeable is the fact that only the middle crest, which is in profile, although the face is in three-quarters front view, is represented, and that it is supported by a flat band with a round boss at

the top instead of the sphinx. The omission of the sphinx is rare, but does occur in very free colossal copies such as that from Pergamum and in the Antiochus copy and in some free adaptations in the minor arts, such as gold and terra-cotta disks, gems, and coins. The substitution of a griffin in relief without crest for the winged Pegasus is rather remarkable, but easily understood when we see that a griffin is not carved on the cheek-piece of the helmet. There is no reason to believe any longer that the original head of Athena had a sphinx flanked by griffins instead of Pegasi, as so many scholars used



FIGURE 5.—MARBLE RELIEF FROM CORINTH.
PROFILE.

to think.¹ Griffins occur on either side of the sphinx in the heads which resemble that of the Athena Farnese and in the Hope Athena (cf. Furtwängler, *Meisterwerke*, pl. iv A, p. 107, Fig. 17, and p. 109, Fig. 18), but the Corinthian relief does not belong to either of these types. The change in the Corinthian relief is arbitrary, just as in the head in Cologne wolves take the place of the Pegasi, possibly, as Loeschcke² thinks, since the wolf was sacred to Mars, to show that Athena was the tutelary divinity of the *legio I Minervia* which was stationed in lower Germany. The cheek-piece of the helmet clearly shows at the bottom the hinges by which it was turned up, and is decorated with a floral pattern which resembles very slightly a thunderbolt.³ The original cheek-piece of the statue of Phidias had a griffin, and a griffin is found there in most copies.⁴ But the Corinthian medallion, as well as the Berlin mould,⁵ varies in this respect from the correct type. A spiral curves around beside the cheek-piece, and continues the front piece of the helmet and its spiral decoration upwards, reminding us in this respect of the head of Athena in Furtwängler's *Meisterwerke*, p. 107, Fig. 17. The hair protrudes below the front of the helmet on the forehead in locks which also turn up in spirals; and there is such a lock in front of the ear as well as behind it. This fondness for the spiral is due undoubtedly to the Roman copyist, who had a taste for archaic Greek art. Despite the free rendering and the many changes which the Roman sculptor has allowed, the Corinthian relief must be counted among the good Roman copies of the head of Athena Parthenos, and certainly it is no mediocre piece of Roman sculpture.

Here is subjoined a more complete list of the copies of the Athena Parthenos than has previously appeared, although a

¹ Cf. p. 493, n. 5. Cf. Hauvette, *B.C.H.* V, 1881, p. 57; Clarac, *Musée de Sculpture*, III, p. 165; Lange, *Athen. Mitt.* V, 1880, pp. 373 f., showed that Pegasi, not griffins, were sculptured on the head of the Varvakion statuette. Schreiber, *Arch. Zeit.* 1883, pp. 193 f., 276 f., even thought that the original helmet had three sphinxes. For griffins instead of Pegasi on the "Minerve au collier," cf. *Mon. Piot*, VII, 1900, p. 163.

² *Op. cit.* p. 15.

³ Cf. Jacobsthal, *Der Blitz in der orientalischen und griechischen Kunst*.

⁴ Cf. above, p. 491.

⁵ Cf. above, p. 491.

good list of the copies known in 1900 was given by Pollak, *Jh. Oest. Arch. I*, IV, 1901, pp. 146 f. Cf. also Jahn-Michaelis, *Arx Athenarum*, pp. xiii, xxxv, 5-9, xxxvii, 6-10; Overbeck, *Geschichte der griechischen Plastik*, I⁴, pp. 350 f., 369 f.; Collignon, *Histoire de la sculpture grecque*, I, pp. 536 f.; Von Duhn, *Kurzes Verzeichnis der Abgüsse nach antiken Bildwerken im arch. Inst. der Univ. Heidelberg*, 5th ed., 1907, pp. 54-56. The heads in Naples (*Aus der Anomia*, pls. i, ii) and in London (*Ancient Marbles in the British Museum*, I, pl. xvi), though cited by Loeschke, *op. cit.* p. 4, are omitted because they are probably not replicas; cf. Furtwängler, *Meisterwerke der griechischen Plastik*, p. 21¹.

A. STATUES

1. Varvakion statuette in National Museum, Athens, Brunn-Bruckmann, *Denkmäler Gr. und Röm. Sculptur*, pls. 39, 40.
2. Lenormant statuette in Athens, Brunn-Bruckmann, *op. cit.* pl. 38.
3. Statuette in Madrid, Brunn-Bruckmann, *op. cit.* pl. 511; Arndt-Amelung, *Photographische Einzel-Aufnahmen antiker Sculpturen (Einzelverkauf)*, Nos. 575, 576, 1510-1515. Cf. also Amelung, *Jh. Oest. Arch. I*, XI, 1908, pp. 194-196. Amelung thinks that only in the heads in Madrid and Copenhagen (No. 20 below) is there preserved "ein letzter Hauch phidiasischen Geistes."
4. "Minerve au collier" in Louvre, Brunn-Bruckmann, *op. cit.* pl. 512, *Mon. Piot*, VII, 1900, p. 161, Figs. 1, 2. Because of its colossal size Schreiber and Arndt thought it resembled the original more than other copies.
5. Colossal Antiochus copy in Buonecompagni collection, Rome, formerly in Villa Ludovisi, Brunn-Bruckmann, *op. cit.* pl. 253, head only in Arndt-Amelung, *op. cit.* Nos. 274, 275. Overbeck, *op. cit.* p. 350, gives first place to this copy.
6. Very free but colossal copy from Pergamum, in Berlin; Furtwängler, *Ueber Statuenkopien im Altertum*, p. 14 (538); Kekule von Stradonitz, 'Ueber Copie einer Frauenstatue aus der Zeit des Pheidias' (57th Winckelmannsprogram, 1897), p. 22, with reproduction of the head; *Jb. Arch. I*, V, 1890, p. 114, XXII, 1907, pp. 55 f. *Die Altertumer von Pergamon*, Bd. II, p. 59, and Bd. VII, *Die Skulpturen*, pp. 33 f., pl. viii (cf. also VII, 2, No. 380). Kekule thought it was the best copy artistically and came nearer to giving an idea of the original than other copies because of its size.
7. Torso in Patras, overestimated in *B.S.A.* III, 1896-97, pl. ix,

pp. 121 f.; Smith, *The Sculptures of the Parthenon*, 2d ed., No. 300 A; Arndt-Amelung, *op. cit.* Nos. 1304-1305.

8. Torso in the museum of the acropolis, Athens, Schreiber, 'Die Athena Parthenos des Phidias,' *Abh. der phil.-hist. Classe der kön. sächs. Ges. der Wiss.* VIII, 1883, pl. iv I; Collignon, *op. cit.* p. 542, considers this the best replica.

9. Torso in Palazzo dei Conservatori in Rome, Schreiber, *op. cit.* pl. iii, E 1-3.

10. Torso in Villa Borghese, Rome, Schreiber, *op. cit.* pl. iv H.

11. Copy in garden of Villa Wolkonsky, now the residence of the American family Conghlin, Rome, Schreiber, *op. cit.* pl. iii D, 1, 2.

12. Headless statuette in Athens, found near the Enneacrunus, *Ath. Mitt.* XIX, 1894, p. 148. Probably same as that pictured *Ath. Mitt.* XXI, 1896, p. 284 (the reference in Daremberg-Saglio, *Dictionnaire*, p. 1928, n. 2, should be corrected to this).

13. Headless torso from Rome in the Somzée collection, Furtwängler, *Sammlung Somzée*, p. 12, and pl. ix, No. 12.

B. HEADS

14. Berlin, *Antike Denkmäler*, I, pl. 3.

15. Paris, *Mon. Piot*, VII, 1900, pp. 153 f., pl. xv.

16. Dresden, *Arch. Anz.* XIII, 1898, pp. 53 f.; *Jb. Arch.* I. XIV, 1899, p. 143.

17. Cologne, Loescheke, *op. cit.* 1891, p. 1 f., pl. i, 1-3.

18. Verona, Museo lapidario, No. 54 (much damaged).

19. Florence (torso ancient but does not belong to head). Riccardi Palace, Dutschke, *Antike Bildwerke in Oberitalien*, II, 118; Amelung, Führer, no. 204; Arndt-Amelung, *op. cit.* Nos. 301, 302.

20. Copenhagen, Glyptothek Ny Carlsberg, Pollak, *Jh. Oest. Arch.* I. IV, 1901, pp. 147 f., Fig. 171 and pl. iv.

21. Head from lower Italy belonging to Professor Pollak, *Jh. Oest. Arch.* I. IV, 1901, pp. 148 f., Fig. 172.

22. Small head in museum of the acropolis, No. 647, *Jh. Oest. Arch.* I. IV, 1901, p. 148, Fig. 173.

23. Small bronze head from Carnuntum, *Jh. Oest. Arch.* I. VII, 1904, pp. 151 f., pl. i.

C. RELIEFS IN MARBLE

24. High relief of whole figure found at Pergamum in 1908; dedication to Athena Polias and Nicephorus by Silia Ammion; *Arch. Anz.* XXIV, 1909, p. 49; and *Ath. Mitt.* XXXV, 1910, pp. 511 f., pl. xxviii, 2. This relief was still in Pergamum on my last visit in 1910.

25. Attic reliefs more or less influenced by Athena Parthenos; Michaelis, *Der Parthenon*, pl. xv, Figs. 6-17; Arndt-Amelung, *op. cit.* V, Nos. 1212-14, 1237, 1277; *Catalogue of Sculpture in British Museum*, I, Nos. 771-773; Kekule von Stradonitz, *Die griechische Skulptur*² p. 123 (relief No. 881 in Berlin); Schöne, *Griechische Reliefs*, Nos. 48, 49, 55, 60, 62, 75, 76, 85; Schreiber, *op. cit.* pp. 575 f., 592.

26. Marble medallion in Corinth with head only, see Figs. 4, 5.

D. MINOR ARTS

(a) Gems. (1) Jasper intaglio in Vienna, signed by Aspasius; Furtwängler, *Die Antiken Gemmen*, pls. xlix, 12; li, 16; Von Schneider, *Album auserlesener Gegenstände der Antiken-sammlung*, Wien, pl. xl, 9. The best reproduction is the enlargement in Loeschke, *op. cit.* pl. i, 4, or *Ath. Mitt.* XXXIII, 1908, pp. 113 f., Beilage, Fig. 4. (2) Other gems with much freer and poorer copies; *Catalogue of gems in the British Museum*, Nos. 637-638; Furtwängler, *op. cit.* pls. xxxviii, 39 (has griffin on cheek-piece), 45, 46; xliv, 66. (3) Pastes in Berlin; Furtwängler, *Beschreibung der geschnittenen Steine*, vi, 321; xviii, 1822; lxvii, 11181; p. 352, No. 11284; *Jh. Oest. Arch. I. IV*, 1901, p. 150, Fig. 175 (this last resembles the gem of Aspasius). The gem given by Murray, *Sculptures of the Parthenon*, pp. 135 f., pl. xv, as a copy of the Athena Parthenos should not be cited as a copy, as is done by Miss Bennett, *A.J.A.* XIII, 1909, p. 436, where the cippus with the owl is (wrongly, in my opinion) interpreted as a "pillar in columnar form." Amelung, *Jh. Oest. Arch. I. XI*, 1908, p. 194, also excludes this gem.

(b) Bronze and Silver Coins and Tesserae. Attic tetradrachms. Coins of Side, Cappadocia, Lycia, Cilicia, Priene, Alexandria, Corinth, Amastris, Cyrrhus, Gortyn, Thessaly, Thrace, Macedonia, and other places; Lermann, *Athenatypen auf griechischen Münzen*, pp. 74-81, pl. ii; Imhoof-Gardner, *Numismatic Commentary on Pausanias*, pl. Y, Nos. 18-25; *Catalogue of the Greek Coins in the British Museum*, Attica, pls. viii, ix; *Ionia*, p. 239, Nos. 55-58, pl. xxiv, 13; *Sitzb. der Berl. Akad. der Wiss.* 1905, pp. 467-475 (where Dressel, contrary to Schrader [cf. *Priene*, pp. 110 f.], thinks Athena Polias at Priene is not a true copy of Athena Parthenos); *Jb. Arch. I. XXII*, 1907, p. 62, n. 13. On coins of Athens not till Hellenistic times, but elsewhere from the end of the fifth century B.C. on. Especially common on coins of the Imperial Age. In Berlin, also, a lead tessera, *Z. Num. X*, 1882, p. 152, also pictured Jahn-Michaelis, *Arx Athenarum*, pl. xxxv, No. 6.

(c) Jewelry. (1) Two gold medallions with pendants from Kertch, in the Hermitage of St. Petersburg, *Ath. Mitt.* VIII, 1883, pl. xv, 1,

2, and pp. 291 f.; *Antiquités du Bosphore Cimmerien*, pl. xix, i. (2) Necklace in possession of his Excellency Von Nelidow, formerly Russian ambassador to Rome, now to Constantinople. In the middle helmeted head of the Parthenos in three-quarters profile. South Russian or Ionic work of fourth century B.C. (3) Fibula in the same collection. Face of Parthenos in relief, showing helmet with three crests and necklace on neck. Bought in Vienna, but of Southern Russian provenance. These two are published with indistinct illustrations by Pollak, *Klassisch-Antike Goldschmiede-Arbeiten im Besitz seiner Excellenz A. J. Nelidow*, pl. xiii, No. 329, and pl. xvii, no. 486. (4) Another fibula to which Professor Pollak called my attention, like no. 3, is published on pl. xxvi, No. 208, of the *Catalogue of the important collection . . . formed by the late Dr. S. Egger of Vienna* (sold by Sotheby, Wilkinson and Hodge at London, 1891; present location unknown to me). (5) Gold disk from Crimea, *Compte Rendu*, 1865, pl. iii, 14; very free adaptation, with three simple crests instead of sphinx and Pegasi as on terra-cotta disk in British Museum (D 397) and vase-handle in Berlin, cf. (e) (5) below.

(d) Terra-cottas. (1) Two small medallions or disks in St. Petersburg from Elteghen, near ancient Theodosia, *Ath. Mitt.* VIII, 1883, pl. xv, 3, and pp. 310 f. (2) Similar disks in British Museum with very free adaptations of head of the type of Athena Parthenos, Walters, *Catalogue of the Terra-cottas in British Museum*, C 101, 833, 848; D 397 (= Fig. 72). Others in Louvre and Berlin, Furtwängler, *Sammlung Sabouroff* II, pl. 145. (3) Fragment of terra-cotta mould from Asia Minor with head in profile, Berlin, see Fröhner, *Terrecuites de la collection Julien Gréau*, p. 79, pl. xciv; Loeschke, *op. cit.* pp. 6, 12 f.; *Arch. Anz.* VII, 1892, p. 106 (Berlin, Inv. No. 8293). (4) Terra-cotta mould, complete, from Corinth, with head in front view, published in this article.

(e) Ceramics. Askoi or gutti with relief of head. (1) One in the Arndt collection (now in the Glyptothek), Munich, published with indistinct photograph by Pagenstecher, *Ath. Mitt.* XXXIII, 1908, pp. 113 f., Beilage, Fig. 1; better illustration in a drawing in Pagenstecher, *Die Calenische Relief-keramik (Ergänzungsheft des Jb. Arch. I. VIII)*, p. 24, Fig. 6, where p. 11, Pagenstecher says it is an askos and not a guttus, as was stated, *Ath. Mitt. l.c.* Much overrated by Pagenstecher, as a careful examination of the askos itself convinced me. Features not well expressed, cold and lifeless. [The relief on a guttus in Berlin given by Pagenstecher, *Ath. Mitt. l.c.*, pp. 124-125, Beilage, Fig. 2, and *Die Calenische Relief-keramik*, p. 92, Fig. 41 (169 a), is hardly that of Athena Parthenos, but rather an Amazon or Roma or some other type of Athena. Similar gutti not cited by Pagenstecher exist elsewhere, as, for example, G 78 in the British Museum. Those given by Pagenstecher on which Roma is figured, pl. xviii, No. 185 e,

pl. xxi, No. 185 c; p. 96, Nos. 185 a-f are of a similar type.] (2) Guttus (G 38) in the British Museum from Cyrenaica, third century b.c., with poor copy of the head of the type of the Athena Parthenos with three crests. (3) Fragment of guttus in Berlin (Furtwängler, *Catalogue*, No. 3852) with relief of head in front view, very similar to coin-types of Sicily and Lower Italy, and in decoration of helmet to the mould from Corinth. Face, however, much inferior. From Curti near Capua, cf. Pagenstecher, *Die Calenische Relief-keramik*, p. 91, No. 166 a, pl. xxi. *Ibid.* No. 166 b also shows influence of the Athena Parthenos. (4) Guttus in the Arndt collection, Munich, with South Italian adaptation of type (has sphinx, Pegasi, necklace); cf. Pagenstecher, *Die Calenische Relief-keramik*, p. 91, No. 165, pl. xxi. (5) Attachment to vase-handle, in Berlin, in same case with mould, cited by Pagenstecher, *Ath. Mitt.* XXXIII, p. 132 (influenced by Parthenos, but not a true copy; three crests, but not in the form of sphinx or Pegasi). (6) Terra-cotta canteen in Gotha with same relief of head on both sides, like the terra-cotta disks and gold medallions, representing the head of Athena Parthenos, but with a Nike behind the left cheek-piece. Nike also in (d) 1, cf. *Arch. Anz.* xiii, 1898, pp. 193-194; *Ath. Mitt.* XXXIII, 1908, pp. 133 f.; *Die Calenische Relief-keramik*, p. 24, Fig. 7.

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THE PANATHENAIC AMPHORA WITH THE
ARCHON'S NAME ASTEIUS

IT may interest readers of the *JOURNAL* to know that the important Panathenaic vase, of which I gave a preliminary description without illustration in *A.J.A.* XIV, 1910, pp. 422-425, is now in the Ashmolean Museum at Oxford. The two illustrations which accompany this note I owe to the great kindness of Professor D. G. Hogarth, keeper of the Ashmolean Museum, who sent them to me with permission to make use of them. The vase, which had been crudely reconstructed when I saw it, was taken to pieces and several extraneous fragments removed. It has now been beautifully made up again by the artist of the Ashmolean Museum under the direction of Professor Hogarth, who will mention it in the next report of the museum. On the obverse the upper parts of the columns with the figures of Victory have been restored, and some small pieces have been inserted into the figure of Athena, but on the whole this side was fairly complete. On the reverse there is a great deal of restoration, but enough was preserved to warrant every important detail, including the relative positions of the two wrestlers and the attitude of the judge, with his right knee slightly bent forward. There is sufficient difference in glaze and color to make the restorations obvious. My statement (*l.c.* p. 423) that "the two nude wrestlers with right foot advanced are bending forward and probably seizing one another by the wrist" must be corrected in view of the new restoration, which seems much better to me. The wrestler to the right has his right foot forward, and that to the left his left foot. The right wrestler seizes with his left hand the one to the left by the right wrist, and places his right hand on his opponent's body under his outstretched left arm. I also failed to mention the rays at the bottom and to see the star which decorates Athena's shield. It is not visible in the poor photograph I have of the vase in

its former condition, but probably careful examination has discovered traces justifying the restoration of the star, which is a frequent shield device (cf. Chase, *Harvard Studies*, XIII, pp.



FIGURE 1.—PANATHENAIC AMPHORA IN OXFORD; OBVERSE.

122 f.). Otherwise the description given before fits the new restoration of this Panathenaic vase with an archon's name

earlier by six years than any hitherto known to occur on vases. Seven of the Panathenaic vases with an archon's name are now

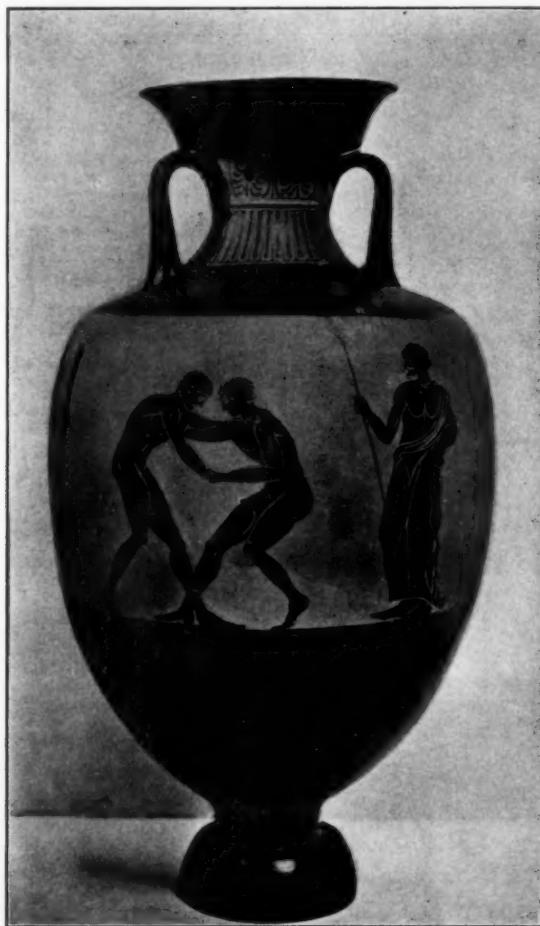


FIGURE 2.—PANATHENAIC AMPHORA IN OXFORD; REVERSE.

in England, but this one with the unique inscription, *ἐπὶ Ἀστεῖο
ἀρχοντος* (373-372 B.C.), is an important addition.

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THE DEVELOPMENT OF CHRISTIAN SYMBOLISM
AS ILLUSTRATED IN ROMAN CATAcomb PAINTING

SINCE the publication of Wilpert's *corpus* of Roman Catacomb paintings in 1903, comparative study of Early Christian art has been greatly facilitated.¹ It is now possible to consider the entire series of catacomb paintings as a whole, just as well as to pursue investigations of separate frescoes or of particular themes. To be sure, study based only on the *corpus* can take but little account of the relative size and arrangement of the respective pictures, their locations in the catacombs, and their immediate surroundings, all of which are important for the drawing of accurate conclusions, so personal examination of the originals is as necessary now as it ever was. The *corpus*, however, is exceedingly valuable, not only because of its absolutely faithful reproduction of the frescoes in respect to technique, but because it is intended to be a trustworthy preservation of originals which time will one day destroy.²

The grouping together of these several hundred plates of paintings has emphasized, for one thing, the essentially symbolic nature of Christian art of the first four centuries. It was scarcely before the fourth century that the didactic themes were introduced, and then naturally enough in response to the demand occasioned by the baptism of the unlearned and only semi-converted populace of the Roman Empire. Accordingly we see in the church mosaics not only the symbolic themes which would appeal to the understanding of the Christian

¹ *Die Malereien der Katacombe Roms*, Freiburg, i. B., 2 Vols. The same in Italian, *Le Pitture delle Catacombe Romane*, Rome.

² This can be observed even in the few years since the publication of Mgr. Wilpert's work. Yet most persons, in comparing the reproductions with the originals, fail to note that the frescoes were washed and cleansed before being photographed and copied, and that this work was done under the best possible conditions of light and atmosphere.

versed in the Scriptures, but also purely didactic themes teaching ignorant men the essential facts of Christianity. And also there was devised in this period of mosaics a series of symbolic themes addressed to unconverted men, but of such character that their persuasive and salutary intention could not be mistaken.¹ This, of course, was altogether different from the symbolism of the pre-Constantinian period, which was intended to be a comfort and a stimulus to men who were certainly Christians.

The art of the catacombs was symbolic in every sense of the word. Not only did the themes themselves present symbolic truth, but even the treatment of the various themes was symbolic. Realism was of little importance in the subterranean paintings, and to such an extent is this true that they may well be characterized as impressionistic. Noah standing in a craft in shape and size very similar to a box is perfectly adequate to symbolize the story of the patriarch and his family and the animals in the ark sailing safely over the waters of the flood. And the theme thus constituted symbolically, and not realistically, symbolized in turn to the discerning Christian great doctrinal truths, such as baptism,² regeneration, divine deliverance, and even the resurrection. This symbolic mode of presenting symbolic truth is justly counted by Mr. Lowrie as being to the distinct advantage of the entire series of catacomb frescoes.³

The catacomb period as such continued over the first four centuries. During this time the symbolic thought of the Church underwent a certain development, as one would naturally expect. It is to be understood, of course, that the symbolic thought here referred to is that expressed by the people of the Church as distinguished from the formal symbols to be found in the abundant theological literature of the period. It is scarcely comprehended even yet what a rich mass of information the catacombs have given us concerning the belief and hope of the

¹ A positive illustration that the point of Christian doctrine was understood and appreciated by fourth century pagans is afforded in the frescoes of the judgment of Vibia in Pluto's court to be found in the catacomb of the Syncretists on the Via Appia. It is a manifest copy of the Christian theme of the judgment of the deceased before Christ's throne.

² 1 Peter, iii, 20, 21. Tertullian, *De Baptismo*, 8.

³ Lowrie, *Monuments of the Early Church (Christian Art and Archaeology)*, pp. 196, 197.

common man, the average Christian, for which one may search in vain the apologetic, explanatory, or anti-heretical writings of the Fathers. The development of this symbolic thought is illustrated by the treatment accorded the various themes portrayed. It may therefore be traced by the simple expedient of observing the introduction and relative popularity of the respective themes, as well as their decline and rejection. A moderately accurate estimate of the prevailing sentiment of each century, and even of each generation, may be attained by such observation. All that is attempted here is a rather general statement of the development of symbolic thought as measured by centuries.

In the following tables the list of themes is given with the number of times that each theme is treated in the frescoes of the Roman catacombs during the several centuries. The series is thus presented in chronological order, so that it will be a simple matter to glance at the tables to determine what themes were introduced in each century, how long they were continued, and how popular they were during the centuries. The tables, therefore, will give an indication of the esteem in which any theme was held by contemporaries. This estimate will, as a rule, be trustworthy, because sufficient paintings have been discovered and preserved to permit us to formulate generalizations. However, it must always be remembered not only that countless paintings were ruthlessly destroyed in the barbarian and Saracen invasions, but also many more have been stolen and ruined by modern vandals, some of which had been noted by explorers in the time of the Renaissance.¹ Besides this, large areas yet remain to be excavated, and nobody can tell what may be found in them. If *all* the paintings were at hand for examination, doubtless the ratios existing at present between the popularity of such and such themes would have to be altered, but probably not very much. Enough are at hand and are distributed sufficiently to establish the belief that they are representative both in chronological order and in ratio.

The statistics contained in these tables are based on Wilpert's *corpus*. The plates in his *corpus* are arranged more or less in chronological order, but not all the paintings are repro-

¹ Paintings once noted but now destroyed are included in the tables with the + sign in front of the number for each century. Most are of the fourth.

duced. Practically all discovered to the date of publication are enumerated in the text, however, and also with the frescoes of each theme in chronological succession.¹ These tables simply present them in convenient form for comparative study and are made from the text and plates.

Wilpert's chronology is followed throughout. It is accepted universally, even by those who do not agree with his interpretation of themes.² A defence of this chronology may not be attempted here, save to point out that it is founded on scientific criteria, such as the quality and number of layers of stucco, the technical execution of the paintings, all the details of the compositions, including the styles of clothing and hairdressing, the laws of symmetry and grouping, the position of the painting in the catacomb, with all that may be gathered from such position, particularly the valuable epigraphic evidence, as well as information to be found in the itineraries, guide books, and other writings of early mediaeval pilgrims relative thereto.

Of these 132 subjects or themes it will be observed that 20 are first century in origin, 34 are second, 22 are third, 49 are fourth, and 7 are fifth century and later.³ Considering the nature of the themes of the several centuries we cannot help remarking a considerable difference. Thus, in the first century they seem to be subjects taken from nature, such as were common in contemporary pagan art, and used largely for decorative purposes. The list includes dolphins, vine and flower designs, cupids, peacocks and other birds, animal forms, a sea monster, ideal forms, landscape *genre* pictures, a fishing scene, and various decorative designs.⁴ Regarding these first century pictures it must be remembered that they are found exclusively

¹ The *corpus* also (in Supplements I and II) arranges the paintings of each catacomb, and gives a chronological order of all the frescoes.

² Cf., e.g., Von Sybel, in his chapter on catacomb painting in Vol. I of his *Christliche Antike*.

³ It must not be supposed that because the sum total of the representations of the themes enumerated is 1465 that number of paintings exists in the catacombs. In the enumeration above the various pictures have been dissected into their component parts, and the themes that are particularly important for symbolic or historical reasons have been thus isolated, so that the list contains a number of duplications, and is not entirely consistent in scheme.

⁴ Second half of the first century, catacomb of Domitilla. Wilpert, *Malereien*, pl. 1 ff.

in the catacomb of Domitilla in the hypogaeum of the Flavian family, and in a room known as the "oldest cubiculum," and in the catacomb of Priscilla in the hypogaeum of the well known Acilian family. So they are not widely distributed, and exist in only one or two examples each. All that they can be said to do is to indicate the link connecting Christian art with pagan art historically, and to mark the beginnings of the Christian. They give an idea of what Christian art would have been like if it had existed in any great measure.

There are, however, several pictures from Biblical sources in this collection, Daniel between the Lions, Noah, and the Good Shepherd. Cupid is also represented as the Good Shepherd, in the type of the Pasturing Shepherd. The Christian Good Shepherd was the King of Love, and the earliest artists, in their embarrassment at originating symbols of divine import, did not hesitate to make use of appropriate attributes, wherever they found them. The pagan Cupid as shepherd served their purpose very well, although it is reasonable to look for the origin of the Good Shepherd of the catacombs in the Scriptures.

The three Biblical themes originated in the first century are adequate only to announce the character of Christian art of the next three centuries. They declare that it will be symbolic. The reason for this prevailing symbolic quality is not hard to determine. The early Christian thought a great deal about the deep truths of his religion. His meditation was guided largely by the sacred writings which he possessed. If he wished to decorate at all the sepulchre of his dear ones with fresco paintings it would be only natural that he should base such decoration on the Scriptures, and being decoration it would have to portray some scene or action. That is, a decoration could hardly express the theological doctrines of St. Paul arranged in logical order as contained in his Epistles. A picture was necessary, and a picture rich in meaning with a point appropriate to its use. The cycle of catacomb themes is limited at once from the very fact they were selected as being appropriate for catacombs. It is thus seen that the reason why early Christian art is symbolic is not because of any intention of concealing mysteries, but because of the necessity of basing it on a distinctive kind of pictures, as well

as because of the pleasure the symbolism gave to the discerning individual Christian when he contemplated the pictures.

The connection with pagan art and pagan custom is further illustrated by a painting of the funeral banquet which formed such an integral part of the ceremonies of interment. While there are only four treatments of this theme in the catacombs, the custom was generally observed by Christians, just as by pagans, and with no offence to their religious scruples. The funeral feast was regarded as being a regular part of the burial duty toward the deceased, as much so as providing them with sarcophagi, or bearing them to their *loculi* in the catacombs. Self respect demanded that these feasts be observed, as well as those maintained on the anniversaries of death or deposition.

In the second century, and early in the century, the frame and groundwork of Christian catacomb symbolism was evolved, and its character fully determined. Here we find expressed in symbolic guise the great doctrines of the scheme of salvation that comfort and reassure the Christian in the thought of death and brighten his hope beyond the grave. In viewing these paintings he would call to mind the divine nature of Christ as attested by His birth from the Virgin and by His miraculous acts, and the witness of the Old and New Testaments to the same. Then he might contemplate Christ's soteriological work, especially as applied to the deceased. He would observe frescoes that both represent and symbolize the sacraments, affording grace for eternal life. Particularly would he find the fundamental elements of Christian eschatology emphasized — after death the judgment, and in the end the resurrection, also heavenly felicity for those whom Christ saved. Continually would he contemplate God's grace and the spiritual nature of the Christian life, especially in its relation to the Kingdom of God.

This may be indicated briefly in outline :

Christological Themes

I.	<i>The Incarnation</i>
	Isaiah's Prophecy (Is. vii. 14)
	Adoration of the Wise Men
	Annunciation
II.	<i>Divine Nature of Christ</i>
	Miracle of the Paralytic
	Miracle of the Woman with an Issue of Blood
	(Raising of Lazarus)

Soteriological Themes	I.	<i>Christ as Agent</i>
		The Sacrifice of Isaac
		“Behold the Lamb of God”
	II.	<i>The Grace of Christ as Saviour</i>
		The Good Shepherd
		Orpheus
		(Susannah)
	I.	<i>Salvation from Sin and Death</i>
		Daniel among the Lions
		Noah
Eschatological Themes		The Babylonian Children
		Susannah
		(Christ's Miracles)
		Ship in Storm
	II.	<i>The Last Judgment</i>
		Christ as Judge
	III.	<i>The Resurrection</i>
		The Seasons
		The Raising of Lazarus
		Jonah (?)
Sacramental Themes	IV.	<i>Heavenly Felicity</i>
		Introduction into Paradise
		Sheep in Green Pastures
		Deceased as Saints
		The Orant ¹
		The Woman of Samaria (the Living Water which affords Eternal Life).
	I.	<i>Baptism</i>
		The Rite of Baptism
		Moses striking the Rock
		Fisherman
		Paralytic healed at Pool of Bethesda
		Noah
	II.	<i>The Eucharist</i>
		Breaking of Bread
		Eucharistic Feast
		Multiplication of Loaves
		The “Break-fast” by the Sea of Galilee after the Resurrection
		Eucharistic Tripods, Baskets of Loaves, Fish, Wine Vessels, etc.

The third century mainly repeats what had been originated in the second, and the great majority of the themes are con-

¹ The Orant has never been interpreted satisfactorily.

tinued in increasing ratio in the fourth. Very little that was new was added in the third century, and the new element consists chiefly in more varied patterns for purely decorative purposes. Among the symbolic themes God's omnipotence and grace are further enlarged, and there seems to be a particular realization of the doctrine of sin, *i.e.* original sin. Adam and Eve are treated four times.

In this century the artists overcome their reluctance to paint Christ realistically, and depict Him as giving His New Law to men. The apostles, including St. Peter, are also painted, but it is manifest that the portrait characteristics depend at the most only on tradition. These pictures belong to the latter half of the century, and proclaim the beginning of the Apocalyptic cycle which received extensive development in the fourth century and later.

Several miracle themes are added in the third century, as those of the Blind Man and the Leper. God's providence in salvation is further indicated by the themes of Tobias, Job, and David. Eucharistic symbolism is increased by the theme of the miracle of the Wine at the marriage feast at Cana of Galilee. It was used in connection with the miracle of the Multiplication of Loaves to symbolize the eucharistic elements, the Fish having by this time developed from its eucharistic symbolism to that represented in the acrostic, as Professor Morey has pointed out.

The Woman of Samaria ceases in this century. Several odd themes appear, such as isolated scenes from real life, including the activities of the fossors, and one that seems to represent the act of veiling a consecrated virgin.¹ One of the so-called *refrigerium* pictures occurs in this century, further pointing to the apocalyptic characteristic of the fourth.

In the fourth century the themes mentioned above are repeated in greater ratio, but with more or less crudity of expression. Yet the fourth century marks a turning point in Christian symbolism. The real change came as a result of Constantine's edict and reflects the changes that took place in the composition of the Church after the peace. An immense

¹ Cf. Tertullian's ideas on this subject as contained in his tract, *De Virginibus Velandis*.

number of persons were admitted who both originated and developed the cult of the Saints and Martyrs and Apostles, and found artistic background for this in the Apocalypse.

The cult arose, doubtless, in a natural enough way: The individual admitted his sinful condition. He was not only afflicted with the guilt of Adam's sin (Adam and Eve are treated fourteen times in this century), but because of his own transgressions was decidedly unworthy. The glorified Christ had saved him, but in his intercessions why not entreat the good offices of the apostles and martyrs who, because of their sufferings, must be very dear to Christ? The memory of the martyrs was still fresh in Rome, and the apostles Peter and Paul were credited with the founding of the Roman church. In some such way as this, step by step, as the inscriptions also testify, the cult arose, and was accepted readily by those who were perfectly willing to exchange Mithras, Isis, and Ceres for SS. Mary,¹ Peter, Paul, Lawrence, Sebastian, Felicitas and her seven sons, etc.

Artistically, we find that the mysterious glory of the Apocalypse seemed to appeal to those who expressed their cult in fresco, and from the fifth century on we know how magnificently it was worked out in the great church mosaics. Symbolism was thus enriched in some respects, such as in mystery and complexity, but it lost the simple depth of thought contained in the frescoes of the second and third centuries.

The characterization given above of the new element in the symbolism of the fourth century is demanded by the numerous pictures of Christ in the college of the apostles, saints, and martyrs, the *refrigerium*, the Evangelists, angels, the cross and nimbus, and the mountain whence flow the four evangelical streams which were painted in that century. Here also belongs the Agape, in all probability.

These are not the only themes added in this century. The symbolism of the previous centuries is increased by a number of appropriate subjects. There are several more miracles, such as the Healing of the Demoniac, the Rain of Manna, which

¹ There is no trace of Mariolatry as a cult, however, till the fifth century in Rome.

probably belongs to the eucharistic cycle, and the Raising of the Daughter of Jairus. This last theme is certainly a symbol of the resurrection, as is perhaps the fresco of the Translation of Elijah.

An especial emphasis seems to be placed on the doctrine of the person of Christ, conformably to the extensive controversies that agitated the theologians of the period. His human and divine natures in one personality are set forth in an addition to the Madonna cycle of sixteen frescoes, including the Nativity at Bethlehem and the prophecies of Balaam and Micah.¹

A reference to the customary test applied to Christians in the days of persecution is very probably found in a treatment of the three Hebrew children before Nebuchadnezzar's image, the image consisting of a herm of the monarch. God's deliverance is further symbolized by a painting of Moses and Aaron persecuted by the Jews. Moses is also depicted removing his sandals in the presence of God. Peter's humiliation is treated once, as is the parable of the Wise and Foolish Virgins.

In the fourth century there are a number of themes from real life, evidently referring to the occupation of the deceased. Thus, the charioteer who won in the circus has also run his earthly race and will receive the crown from a winged Victory. A soldier's portrait is found, as well as various pagan subjects such as Oceanus. Oceanus may have referred to the sea-faring occupation of the man whose tomb he adorns. There are also scenes from the shop of the miller, the baker, the grain dealer, the herb woman, etc. There are also a few new ideas in geometric decoration.

Paintings from the fifth to the ninth century are found in the Roman catacombs, and continue the apocalyptic characteristic of the fourth in accordance with contemporary ideas and in the full wealth of Byzantine expression. A certain matter-of-fact quality is now to be observed, as in the frescoes at the tomb of the martyr bishop Cornelius, in the catacomb of Callixtus. The pictured saints look as if they had a perfect right to be where they are, and might give valuable assistance to those who entreated them. These pictures conform in all respects to

¹ Num. xxiv. 17; Micah v. 2.

the recognized canons of the Byzantine art of the period, and are like the corresponding mosaics.

In the catacomb of St. Valentine a curious series of seventh century frescoes is observed, consisting of scenes of the nativity and the crucifixion. This is the only picture of the crucifixion in the entire field of catacomb art, and is one of the earliest paintings of the theme yet discovered.

Such is an outline sketch of the development of symbolic thought among the people of the Church during the first four centuries, as illustrated in catacomb painting. Beginning with inoffensive classic types, the Christian artists rapidly created a series of paintings that expressed in symbolic form the salutary principles of their religion and their bright hope of the life to come. This underwent a constant development, both by confirming in numerous repetitions the themes already elected, and by adding new themes of similar and different import to those previously chosen. Then, in the fourth century, an entirely new series was originated in response to the cult of the martyrs. By an examination of the themes as tabulated it is possible thus to trace the development of popular religious thought. It is reflected significantly in the paintings. It is to be observed that while this corresponds in general with what we have always known concerning the history of the early Church, a considerable amount of information is obtained concerning matters of detail. An entire series of symbols is added to the theological ones of the ante-Nicene Fathers. Because of their simplicity they are much more refreshing than the fanciful allegorical wanderings and arid speculations of many of the verbose Fathers. But their chief value consists in the fact that they reflect accurately the thought of the Christian people.

TABLE OF PAINTINGS IN THE CATACOMBS¹

NUMBER	SUBJECTS	I	II	III	IV	LATER	TOTAL
1	Grape Vine Designs . . .	1	1	—	4	—	6
2	Cupids	2	1	3	11	—	17
3	Birds (general)	1	9	22	67	1	100
4	Peacocks	1	6	7	8	—	22
5	Decorative Patterns (varied)	5	9	29	71	1	115
6	Dolphins	1	2	3	2	—	8
7	Daniel among Lions . . .	1	2	1/2 1 ψ 1 2/2 5 ω 6 13	α 2 1/2 4 ψ 6 2/2 8 20 +3 23	—	39
8	Fishing Scenes	1	2	—	—	—	3
9	Animal Groups	1	1	10	4	1	17
10	Noah	1	α 1	1/2 2 ψ 2 2/2 3 ω 2 9	α 1 1/2 4 ψ 8 2/2 7 20 +4 24	—	35
11	Asters	1	—	—	—	—	1
12	Landscape, and <i>Genre</i> Pictures	2	—	2	1	—	5
13	Ideal Heads	1	4	1	4	—	10
14	Funeral Banquet	1	—	2	1	—	4
15	Cups, Vases, etc.	1	6	8	17	—	32
16	Good Shepherd	3	11	29	53+13	1	110
17	Ideal Human Figures . . .	1	—	—	7	—	8
18	Cupid as Shepherd . . .	1	—	—	—	—	1
19	Sea Monster	1	2	2	1	—	6
20	Sheep and Milkpail . . .	1	1	5	2	—	9
21	Moses striking Rock . . .	—	5	1/2 3 2/2 6 ω 3 12	1/2 15 ψ 13 2/2 18 46 +5 51	—	68
22	Babylonian Children . . .	—	α 1	3	11+4	—	19

¹ The abbreviations α, ψ, ω, 1/2 and 2/2 indicate the beginning, middle, end, first half and second half respectively of the century listed in Roman numerals at the head of the column.

NUMBER	SUBJECTS	I	II	III	IV	LATER	TOTAL
23	Baptism	—	$\alpha 1$ 1/2 1 2/2 2 4	1/2 1 $\psi 1$ 2 $\psi + 1$ 3	2/2 2	1	635
24	The Seasons	—	2	1	5	—	10
25	Susannah	—	1	1	4	—	6
26	Breaking of Bread . . .	—	1	—	—	—	1
27	Sacrifice of Isaac . . .	—	$\alpha 1$ 2/2 1 2	$\psi 1$ 2/2 2 $\omega 2$ 5	1/2 4 $\psi 3$ 2/2 5 $\omega 1$ 13 + 1 14	—	21
28	Raising of Lazarus . . .	—	$\alpha 1$ 1/2 1 2/2 2 $\omega 2$ 6	1/2 3 $\psi 1$ 2/2 2 $\omega 1$ 7	$\alpha 3$ 1/2 11 $\psi 8$ 2/2 16 38 + 3 41	—	54
29	Orants	—	5	57	92	3	157
30	Deceased as Saints . . .	—	3	2	13	—	18
31	Behold the Lamb of God .	—	1/2 1	—	—	—	1
32	Woman of Samaria . . .	—	1/2 1 2/2 1 2	1/2 1 $\psi 1$ 2	2/2 16 38 + 3 41	—	4
33	Woman with Issue of Blood	—	1/2 1	2	2	—	5
34	Prophets and Prophecy .	—	1/2 1	+ 1	1	—	3
35	Virgin and Child	—	$\alpha 1$ 1/2 1 2	1/2 1 2/2 3 4	1/2 3 $\psi 2$ 2/2 7 12 + 4 16	2	25
36	Christ as Judge	—	2	4	9	—	15
37	Genius	—	2	—	3	—	5
38	Jonah	—	1/2 1 2/2 3 $\omega 4$ 8	1/2 2 $\psi 4$ 2/2 7 $\omega 4$ 17	$\alpha 2$ 1/2 12 $\psi 7$ 2/2 6 27 + 6 33	—	58

NUMBER	SUBJECTS	I	II	III	IV	LATER	TOTAL
39	Fish — separate	—	3	1	—	—	4
40	Unidentified Themes . . .	—	1	1	4	—	6
41	Orpheus	—	1	2	2	—	5
42	Tripods (eucharistic) . .	—	2	—	—	—	2
43	Baskets of Bread (isolated)	—	1	1	1	—	3
44	Introduction into Paradise	—	1	4	6	—	
			?	$\frac{1}{2}$			
45	Eucharistic Meal	—	2/2 2	—	1/2 4	—	
			ω $\frac{2}{4}$		ψ $\frac{3}{7}$		
46	Paralytic Healed	—	α 1 2/2 1 2/2 1 2	ψ 3 2/2 2 ω 1 6	α 1 1/2 2 ψ 2 2/2 6 11 +1 12	—	11
47	Multiplication of Loaves .	—	2/2 1	1/2 2 ψ 2 2/2 1 ω 4 9	1/2 5 ψ 6 2/2 9 20 +2 22	—	20
48	Crown of Leaves	—	1	3	3	—	7
49	Sheep (not Good Shepherd)	—	2	8	17	1	28
50	Annunciation	—	1	1	—	—	2
51	Roses	—	1	4	6	—	11
52	Fossors	—	1	6	3	—	10
53	Gestures of Prayer, Adoration, etc. (not orant) .	—	1	1	2	—	4
54	Ship (other than Jonah) .	—	1	—	1	—	2
55	Christ as Teacher, Giver of New Law.	—	—	1	8	—	9
56	Amor and Psyche	—	—	1	1	—	2
57	David (with sling)	—	—	1	—	—	1
58	Tobias	—	—	1	2	—	3
59	Job	—	—	2	$6 + 3$	—	11
60	Healing of Blind Man . .	—	—	5	$1 + 1$	—	7
61	Healing of Leper	—	—	2	1	—	3
62	Unclassified Miracle Scenes	—	—	1	1	—	2
63	Wine Miracle at Cana . .	—	—	1/2 1 ω $\frac{1}{2}$	ψ 1	—	3
64	Scenes from Real Life . .	—	—	1	6	—	7

NUMBER	SUBJECTS	I	II	III	IV	LATER	TOTAL
65	Adam and Eve	—	—	ψ 1 2/2 2 ω 1 4	α 1 1/2 5 ψ 1 2/2 7	—	1233
66	Veiling of Consecrated Virgin	—	—	1	—	—	18
67	Christ (without particular attributes)	—	—	1	15	2	18
68	Daniel (not with lions)	—	—	1	—	—	1
69	Apostles	—	—	1	4	—	5
70	Martyr with Crown	—	—	1	—	2	3
71	St. Peter	—	—	1	2	—	3
72	Shepherd milking Sheep	—	—	2	—	—	2
73	Cup Bearer	—	—	1	—	—	1
74	Refrigerium	—	—	1	3	—	4
75	Inscriptions of Note	—	—	4	19	8	31
76	Masks	—	—	1	—	—	1
77	Daughter of Jairus	—	—	—	α 1	—	1
78	Nebuchadnezzar's Image	—	—	—	1 + 1	—	2
79	Nebuchadnezzar	—	—	—	1 + 1	—	2
80	Saints in Presence of Christ	—	—	—	1	3	4
81	Saints crowned by Christ	—	—	—	1	2	3
82	Christ in midst of Apostles	—	—	—	14	—	14
83	Oceanus	—	—	—	1	—	1
84	Caduceus	—	—	—	1	—	1
85	Horses	—	—	—	2	—	2
86	Charioteer and Chariot	—	—	—	1	—	1
87	Victories	—	—	—	1	—	1
88	Kanephora	—	—	—	2	—	2
89	Runner	—	—	—	1	—	1
90	Muses	—	—	—	1	—	1
91	Soldier	—	—	—	1	—	1
92	Weapons	—	—	—	1	—	1
93	The Manger (Presepio)	—	—	—	2	—	2
94	Eucharistic Symbols						
	Bread and Wine (isolated)	—	—	—	2	—	2
95	Shepherds of Bethlehem	—	—	—	1	—	1
96	Balaam	—	—	—	3	—	3
97	Helios	—	—	—	1	—	1
98	Tricliniarch	—	—	—	1	—	1
99	Serpent	—	—	—	3	—	3
100	The Evangelists	—	—	—	1	—	1
101	Keys	—	—	—	1	—	1

NUMBER	SUBJECTS	I	II	III	IV	LATER	TOTAL
102	Agape	—	—	—	4 + 2	—	6
103	Concealed Cross . . .	—	—	—	1	—	1
104	Moses (other than at rock)	—	—	—	6	—	6
105	Wise and Foolish Virgins	—	—	—	2	—	2
106	Triptych	—	—	—	1	—	1
107	The Cross	—	—	—	3	5	8
108	• and Variations . . .	—	—	—	9	—	9
109	SS. Peter and Paul . . .	—	—	—	7	—	7
110	Wolves	—	—	—	2	—	2
111	Opus Alexandrinum . . .	—	—	—	1	—	1
112	Mss. Rolls and Cases for Same	—	—	—	6	—	6
113	Angels	—	—	—	1	1	2
114	Nimbus	—	1 (?)	—	8	10	18
115	Multitude satisfied with Bread	—	—	—	1	—	1
116	Martyrs	—	—	—	2	—	2
117	The Moon	—	—	—	1	—	1
118	Man with Roll	—	—	—	1	—	1
119	Moses and Aaron perse- cuted by the Jews . . .	—	—	—	1	—	1
120	Bethlehem	—	—	—	1	—	1
121	Translation of Elijah . . .	—	—	—	1	—	1
122	Peter's Denial	—	—	—	1	—	1
123	Rain of Manna	—	—	—	1	—	1
124	Healing of Demoniac . . .	—	—	—	2	—	2
125	Mountain with Four Streams	—	—	—	1	—	1
126	Jewelled Cross	—	—	—	—	ω V 1 VI or VII IX 1 3	3
127	Books	—	—	—	—	ω V 1	1
128	St. John the Baptist . . .	—	—	—	—	VI or VII	1
129	Visitation of Mary . . .	—	—	—	—	VII 1	1
130	Bath of the Christ Child .	—	—	—	—	VII 1	1
131	Christ Child in Cradle . .	—	—	—	—	VII 1	1
132	Crucifixion and Group at the Cross	—	—	—	—	VII 1	1
							1465

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THE EL-TEKKÎYEH INSCRIPTIONS¹

ON the twenty-first day of November, 1910 (at the suggestion of the Rev. J. E. Hanauer, the veteran archaeologist of Damascus), with two of my students, Messrs. C. H. Lager and W. C. Wood, I visited the el-Tekkiyeh station of the



FIGURE 1.—EL-TEKKÎYEH, BY THE RIVER BARADÂ IN ANTI-LEBANON,
LOOKING NORTHWEST.

French railway, thirty-four kilometers from the Beramke station at Damascus, and passed six hours in examining three

¹ In the examination of the inscriptions on the spot Mr. Wood was of the greatest service, owing to his practical skill in the determination of the letters. He also took many photographs, of which the three broad fragments of Columns B and C are fair samples. Mr. Lager has given by far the greatest amount of time to all the problems involved; he suggested also the idea of connecting the name of Quietus with the rebuilding of the Roman road from Heliopolis (Ba'albek) to Damascus, and to him are due in their entirety the readings, actual and conjectured, for Column C.

Roman milestones opposite the station, in copying the inscriptions contained thereon, and in taking photographs of them. The present relative position of the columns is of no moment, since they were removed in 1893 two kilometers to the westward from the railway gap, where they had been buried, probably for centuries, 10 feet below the surface. Column A (see below) is of a reddish white marble, Columns B and C, of limestone. The letters of the A¹ inscription are 3 inches high, those of the A² and B inscriptions, 1½, and of C, 1½ inches.

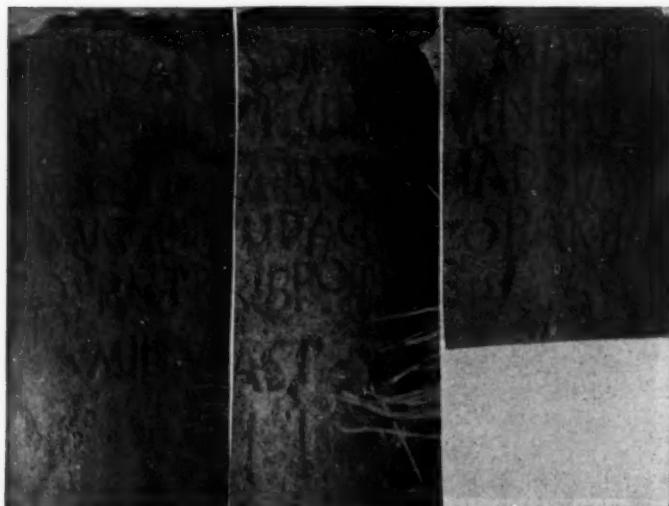


FIGURE 2.—THE INSCRIPTION OF HADRIAN. COLUMN A¹ (OBVERSE).

For the rest, the measures given in Clermont-Ganneau's *Recueil d'Archéologie Orientale*, II (1898), pp. 35 *sq.*,¹ as furnished by the late M. J. Löytved, consul at Beirût for Denmark, Sweden, and Norway, are approximately correct, and the testimony of three of the inscriptions is given in substance, though mistakes were made in the decipherment, and no *facsimiles* were given. In these two facts lies our excuse for presenting this supplementary report on these interesting stones.

¹ Cf. the same report in *Revue Archéologique*, troisième Série, XXX, 1897, pp. 234 *sq.*, and the inscriptions reproduced in *C.I.L.* III, Sup. 14177.

The marble *miliarium* (Column A) was probably erected early in the reign of Hadrian, 117 A.D., and the obverse A¹ (Fig. 2) was then engraved upon the stone. In the reign of Constantine the Great, between 333 and 337 A.D., the reverse A² (Fig. 3) was cut upon the Pillar of Hadrian. It will be observed that the third line of this inscription had to be prolonged into the space between the second and third lines of the Hadrian writing.

The completed text of Column A¹ is as follows:

IMP(E RATORI) CAES(ARI), DIVI TRAIANI
 PARTHICI FIL(IO), DIVI NERVAE
 NEPOTI, TRAIANO HADRIANO
 AUG(USTO) GERM(ANICO) DACICO PARTHICO
 P(ONTIFICI) M(AXIMO), TRIB(UNICAE)
 POT(ESTATIS), P(ATRI) P(ATRIAE)
 MIL(IA) PASS(UUM)
 II

The *e* and *r* are so indicated because the original is somewhat mutilated here, but the letter taken for *E* is as nearly like it as anything else, and in the photograph the *R* appears nearly complete.

The *V*, read by Mr. Löytved just before *Aug.*, is simply a break in the marble, and the *O* in *Parthico*, neglected by him, is as clear as it could possibly be.

The use of *Augustus*, indicating the ruling emperor, for *divus*, which is frequently attributed to the deified deceased monarch, shows that the monument was set up during Hadrian's reign. He succeeded his adoptive father, Trajan, as emperor in August, 117 A.D. He counted his TR. P. II from December 10, 117, and his COS. II from January 1, 118, and the renewal occurred each year on these dates. In 135 A.D., when he had returned from Palestine after the dearly-bought victory over the Jews at Bether (Bittir), the Senate conferred upon him the title IMP. II. The absence of a number after the *Trib. Pot.* of our inscription suggests a date for it between August and December 10, 117 A.D.

It is worth while to contemplate a possibility respecting the

erection of this monument. We may remind ourselves, then, that while Trajan was subduing the Parthians during his latest years, the Jews in Palestine and the neighboring regions rebelled against him and attempted to expel the Romans from their country. The emperor therefore ordered the Mauritanian prince, Lucius Quietus, to purge the provinces of the Jews.



FIGURE 3.—THE CONSTANTINE INSCRIPTION. COLUMN A² (REVERSE).

In consequence of his strict obedience to this order, the legate, about 116 A.D., was promoted to the governorship of the contested territory. Suddenly Trajan died, and his successor was compelled to visit the East and to advance as far as Egypt in order to restore tranquillity. It is likely, then, that Quietus, who was responsible for the public roads and would be particularly anxious to win the favor of the new emperor now

approaching his land, ordered his cities and districts to repair the imperial road between Damascus and Heliopolis (Ba'albek), and that the people of Abila, the present Sūk Wâdy Baradâ, then the capital, of the tetrarchy of Abilene (Luke iii. 1),



FIGURE 4.—THE SECOND CONSTANTINE INSCRIPTION. COLUMN B.

erected this marble column two Roman miles to the westward of their city. Since Trajan had distinguished himself so much in the Parthian wars, and had adopted in the summer of 116 A.D. the title *Parthicus*, it is natural that the governor should honor



FIGURE 6.—DETAILS OF COLUMN B.

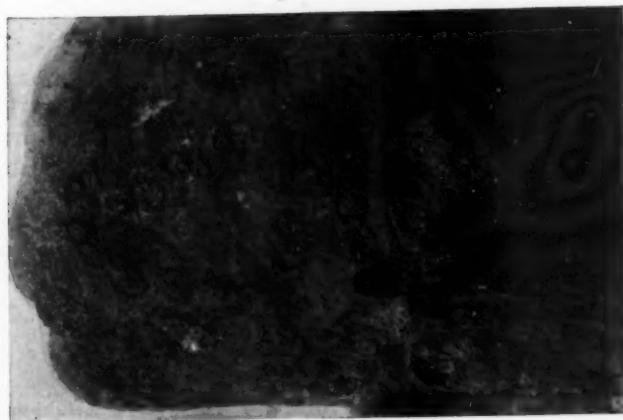


FIGURE 5.—DETAILS OF COLUMN B.

the new emperor with the same epithet. This appears to be the first time that *Parthicus* is found in the Oriental inscriptions of Hadrian. The use of such a term confirms us in the assignment of an early date for the inscription, since the term would not be adopted after Hadrian had made Armenia independent and had yielded the territory east of the Euphrates to the Parthians.

The text of A² follows:

d d d d N N N N
 C O N S T A N T I N O M A X I M O
 V I C T O R I A C T R I U M F A T O R I
 R E M P E R A U S E T
 C O N S T A N T I N O E T
 C O N S T A N T I O E T
 C O N S T A N T E N O b b
 C A E R r

In *Triumfatori* the dative ending *i*, omitted by Mr. Löytved, is perfectly legible. *Constante* is read correctly, although the name is found regularly with a final *i*.

Column B (Figs. 4, 5, and 6) and Column C (Figs. 7 and 8) are at present standing beside one another. Column B contains a duplicate of Column A². With symbols explained and full names restored the text follows:

D(O M I N I S) N(O S T R I S)
 C O N S T A N T I N O M A X I M O
 V I C T O R I A C T R I U M F A T O R I
 S E M P E R A U G(U S T O) E T
 C O N S T A N T I N O E T
 C O N S T A N T I O E T
 C O N S T A N T E, N O B(I U S S I M I S)
 C A E S(A R I B U S)

The photographs of this inscription show, before *aximo* in the second line, a good Θ in place of the unmeaning IP of the first decipherment.

The first letter of the third line (V) is not doubtful, though not previously noted on the stone.

For the adoption of N for RI in *Triumphatori* (Löytved), we found no evidence either on stone or photograph.



FIGURE 7.—THE MUTILATED INSCRIPTION. COLUMN C.

Here follow photographs of Column C (Figs. 7 and 8), accompanied by a drawing of what remains of the inscription (Fig. 9) and an attempted restoration of the text.



FIGURE 8.—COLUMN C.

CONSTANTIN
III
KU GIANT/NOMAD/ma
YI FLAKIUMRA/CFI
NPAS
KYI
KWTANTI NOCT 1
KINNETA I - IUT
YKONCT/MELEIO 0
TAFR
OUXXO

FIGURE 9.—DRAWING OF THE INSCRIPTION.
COLUMN C.

DOMINIS NOSTRIS
 KΩΝΣΤΑΝΤΙΝΟ
 ABILA II
 KΩΝΣΤΑΝΤΙΝΟ MAXIMO
 VICTORI AC TRIVMFATORI
 SEMPER AVGVSTO, DEFENSORI
 QVIETIS PVBLCAE, ET FL
 CL KΩΝΣΤΑΝΤΙΝΟ ET FL
 IVL KINNΣΤΑΝΤΙΟ ET FL
 IVL KONΣTANTE NOBILISSIMIS
 CAESARIBVS
 MILA PASSVVM XXX HELLOPOULS

We have here both Latin and Greek letters, and, in the amended text, the names of the *emperors* are given in Greek capitals. Whether the N is omitted from the eighth line accidentally, or intentionally, to distinguish son from father, cannot be determined.

It is evident that the inscription has been intentionally, as well as seriously, mutilated ; so much so that, while we can be reasonably certain of the recorded distance from Abila (Sūk Wādy Baradā), that from Heliopolis (Ba'albek) is involved in serious question, owing to the destroyer's frequent use of cross cuts resembling an X. Still, the regularity of the cross strokes in the last line, and the use of a good Ω before them, make it probable that the four letters have been read correctly. If there is an O after the record of distance, it may perhaps stand for *On*, and prove an Egyptian influence on this eccentric scribe.

The phrase that gave particular offence to the destroyer appears to have been "defender of public peace," an expression which is found also in an Alexandrian inscription of Constantine published in *C.I.L.* III, 17. That these were the words actually used here is rendered practically certain by the presence of KUI at the beginning of the seventh line.

CHARLES RUFUS BROWN,
 Director of the American School of Oriental
 Research in Jerusalem, 1910-11.

NEWTON CENTRE, MASSACHUSETTS.

1911
January—June

ARCHAEOLOGICAL DISCUSSIONS¹

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

WILLIAM N. BATES, *Editor*

220, St. Mark's Square, Philadelphia, Pa.

GENERAL AND MISCELLANEOUS

Miscellanea Salinas. — Under the title *Miscellanea di archeologia, storia e filologia dedicata al Prof. Antonio Salinas nel XL anniversario del insegnamento accademico* (Rome, 1911, E. Loescher & Co. 428 pp.; 4 pls.; 62 figs.; L. 25), friends of Professor Salinas publish the following articles of interest for archaeology and the history of art: pp. 3-14 (2 figs.), H. DIELS attempts to explain the nature of Baubo in connection with the worship of Demeter; pp. 15-19, R. SABBADINI discusses the Greek elements in the proper names of Elba; pp. 25-35 (pl.), P. ORSI discusses a bearded head from a grave relief, found at Camarina and dating from the end of the fifth century B.C.; pp. 36-45 (7 figs.), A. L. DELATTRE gives a general account of the necropolis of the Rabs at Carthage; pp. 46-54 (pl.; fig.), G. PATRONI identifies a bust at the University of Pavia as a portrait of Lysimachus; pp. 55-56 (fig.), A. PELLEGRINI publishes a Christian lamp and a Carthaginian inscription; pp. 57-70, A. SOGLIANO discusses Cumae $\dot{\eta}$ *ἐν Ὀπικά*; pp. 71-80 (6 figs.), G. LAMBAKES describes Christian remains at Cenchreæ; pp. 81-86, G. DE PETRA discusses the location of the Sirens; pp. 98-104, S. AMBROSOLI shows that the head on one of the types of third-century denarii inscribed *Divo Traiano* represents Decius; pp. 105-112, W. DÖRPFELD shows that Trinacria, *i.e.* Sicily, has nothing to do with the Homeric Thrinacia, which is to be identified with the southern part of Italy; pp. 113-117 (2 figs.), F. GNECCHI describes a new rectangular Roman bronze with an ewer on one side and the prow of a ship on the other; pp. 126-134 (2 pls.).

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor BATES, Editor-in-charge, assisted by Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Mr. L. D. CASKEY, Miss EDITH H. HALL, Professor HAROLD R. HASTINGS, Professor ELMER T. MERRILL, Professor FRANK G. MOORE, Professor CHARLES R. MOREY, Dr. JAMES M. PATON, Professor LEWIS B. PATON, Professor A. S. PEASE, Professor S. B. PLATNER, Dr. N. P. VLACHOS, and the Editors, especially Professor MARQUAND.

No attempt is made to include in this number of the JOURNAL material published after July 1, 1911.

For an explanation of the abbreviations, see pp. 128, 129.

E. GABRICI discusses the similarity in types between coins from the coast of Asia Minor and the Aegean Islands and certain Italian cities; pp. 145-152 (5 figs.), I. N. Svoronos shows that a bronze coin recently found at Chalcis with the head of Zeus and the legend ΔΙΟΣ ΕΘΕΤΩΝ on the obverse, and a charging bull on the reverse, was issued by a town located somewhere in Epirus or Thessaly; pp. 172-178 (2 figs.), G. PANSA discusses the significance of the discovery of *aes signatum*, near Lago Fucino, for the introduction of coined money into Italy; pp. 179-200 (10 figs.), F. EUSEBIO discusses the Roman walls of Alba Pompeia; pp. 209-215, T. SCHREIBER discusses a series of six terra-cotta figures of mourning women from Alexandria; pp. 223-224, G. BELOCH argues that the Sicilian town of Herbita was located between Mistretta and the sea; pp. 225-226, N. VULIĆ argues that the word *castris* given as the place of origin of certain Roman soldiers means that they were born while their fathers were on service; pp. 227-239, G. M. COLUMBA discusses the geography of the Odyssey in connection with Sicily; p. 240, B. PACE publishes a Christian epitaph in Greek, from Comiso; pp. 243-253 (fig.), C. A. NALLINO publishes two Arabic inscriptions found near Naples; pp. 254-255 (fig.), B. M. LAGUMINA discusses a Swabian coin from Raffadali; pp. 307-316, G. B. SIRAGUSA discusses a miniature in Codex 120 of the library of Bern; pp. 317-327 (5 figs.), G. RUGGERO publishes notes on mediaeval Italian coins; pp. 347-351, W. ROLFS discusses the Madonna of the Annunciation at Trapani; pp. 352-362 (2 figs.), G. DI MARZO publishes a document in Palermo, dated 1468, relating to the sculptor Francesco di Laurana; pp. 363-372, the same writer publishes two documents relating to the Lombard sculptor, Pietro di Bonate; pp. 373-381 (3 figs.), C. MATRANGA discusses Sicilian wood engraving as shown in a work of Johanne de Ortega, published in 1522; pp. 382-395 (2 figs.), S. SALVATORE-MARINO shows that the standard of the Santa Lega in 1571 is depicted in two contemporary books; pp. 396-399 (fig.), G. MILLUNZI publishes an autograph letter of the painter Pietro Novelli written in 1625; pp. 400-405, G. A. DI MONTECHIARO publishes two unedited documents relating to the Orion fountain in Messina.

Kalkmann's Work on Art. — The manuscript of A. Kalkmann's intended great work on art and the aesthetic and intellectual relations of artists to their times, which was left uncompleted at his death in 1905, has been printed for private circulation, with preface and memoir by two of his personal friends. (*Arch. Anz.* 1910, col. 536.)

Montelius on Prehistoric Chronology. — In *Z. Ethn.* XLII, 1910, pp. 955-960, O. MONTELius gives a résumé of his various conclusions as to the possibility of attaining an exact chronology of prehistoric things. He shows that the various epochs in different parts of Europe were more nearly contemporary than has been heretofore supposed, and that fairly exact dates may be assigned to these periods, 1100-1000, 1000-900, 900-800, 800-700, 700-600, forming, according to him, the five periods of the Iron Age.

Comb Patterns in Old Aegean and Middle European Culture. — In *Z. Ethn.* XLIII, 1911, pp. 161-163 (3 figs.), H. SCHMIDT writes of the significance of some single and double comb patterns on pottery, as casting light on the relation between the Old Aegean and Middle European civilizations. Double combs, such as are represented on the discus of Phaestus, and also on the pottery of Tordos (Transylvania), are found likewise on

vases of the Stone Age from Thessaly, which served apparently as a stepping-stone between the two civilizations.

The Prehistoric Period in Malta. — In *B.S.R.* V, 1910, pp. 141-163, T. E. PEET contributes to the study of the prehistoric period in Malta, combating in the first part of his paper the view, expressed most decidedly by Mayr and others, that Malta belonged to a circle of countries which developed under the influence of the older Aegean and later Mycenaean culture; and in the second part describing excavations at Bahria, which have yielded some unique types of pottery.

The Preparation of Skins in the Stone Age. — In *Z. Ethn.* XLII, 1910, pp. 839-895 (110 figs.), L. PFEIFFER, basing his conclusions on present-day implements and processes, especially those of peoples now living in a primitive state of culture, discusses the uses of many prehistoric leather-working tools, and the probable methods of procedure in manufacturing and tanning skins.

Stone Age Settlements in Finland. — In *Übersicht der Steinzeitlichen Wohnplatzfunde in Finland* (Helsingfors, 1909, Akademische Buchhandlung, 144 pp.; 68 figs.), J. AILIO discusses the settlements of the Stone Age in Finland, the character of their remains, their date, etc.

Prehistoric Flint Mines near Kvarnby and S. Sallerup. — In his doctor's dissertation, entitled *Förhistoriska Flintgrufvor och Kultuslager vid Kvarnby och S. Sallerup i Skåne* (Stockholm, 1910, Haeggström, 102 pp.; 87 figs.), BROR SCHNITTGER discusses the flint mines and the prehistoric remains near Kvarnby and S. Sallerup in Skåne, Sweden.

A Second Gold Land of Solomon's. — In *Z. Ethn.* XLIII, 1911, pp. 1-79 (8 figs.), J. DAHSE finds a second gold land of Solomon's (not that of Ophir) in the Gold Coast of Ashanti, which he thinks was visited in connection with Phoenician voyages to Tartessus in the Iberian peninsula. The article is in the nature of a history of the west coast of Africa as a gold-producing country, and one chapter discusses the ancients' knowledge of this region, Atlas, Atlantis, the Elysian Plain, voyages of Hanno and the Pseudo-Skylax, etc., entering into the tale. He thinks that the so-called aggy-beads were brought to the coast from Egypt to be exchanged for gold. The swastika as a symbol on gold weights is discussed, as is the astronomical knowledge of the natives, which seems akin to that of the East, and was perhaps derived from their intercourse with the Phoenicians. He refutes the idea that Guinea could itself have been the Ophir of Solomon.

EGYPT

The Decree of Amenophis, Son of Hapu. — In *Sitzb. Berl. Akad.* 1910, pp. 932-948 (pl.), G. MÖLLER publishes, with translation and commentary, the decree of Amenophis, Son of Hapu (Birch, in Chabas, *Mélanges*, I, 2^e série, 324-343; Brugsch, *Aeg. Zeitung*, XIII, 125-127, Erman, *Aegypten*, p. 214 f.; Breasted, *Ancient Records*, pp. 377-381). He concludes that it is an ancient forgery, composed and written under the twenty-first dynasty.

The Hyksos. — In *J. Asiat.* XVI, 1910, pp. 247-340, R. WEILL gathers all the material bearing upon the history of the Hyksos from Egyptian and other sources and arranges this in chronological order. The conclusions which he reaches from this material remain for discussion in a later article.

Circumnavigation of Africa.—The story of the circumnavigation of Africa in the reign of the Egyptian king Necho, as related by Herodotus (IV, 42), was declared by W. Sieglin, at the November (1909) meeting of the Berlin Archaeological Society, to be a fabrication, inconsistent with climatic and geographical facts and suspicious as well from the entire silence of other learned and travelled Greeks, both before and after Herodotus. His arguments were opposed by H. Schuchhardt. (*Arch. Anz.* 1910, cols. 523-527.)

The Murch Collection of Antiquities.—In a supplement to *B. Metr. Mus.* January, 1911 (28 pp.; 22 figs.), A. G. MACK describes the Murch collection of Egyptian antiquities, chiefly small objects, recently acquired by the Metropolitan Museum of New York. It contains 42 examples of cylinder seals, of which 17 date back to very early times and have not yet been satisfactorily deciphered. Twenty-three bear royal names including such rare ones as User-n-ra of the fifth dynasty, and Ra-mer-nefer and Her-tep-tau of the thirteenth dynasty. There are over 800 scarabs and other types of seal used for stamping, of which 242 bear royal names and 70 private names; and a considerable number of signet rings. There are two large scarabs of Amenhetep III, on one of which the king relates that between the first and tenth years of his reign he "shot with his own bow 102 lions, fierce ones." The other commemorates the celebration of his marriage with Queen Tii. The collection also includes twenty heart scarabs, a glazed limestone fragment giving both cartouches of Amenrud of the twenty-third dynasty, excellent specimens of glass, many coins and amulets, a few pieces of pottery, etc. Of the amulets there are twenty-four varieties antedating the period of foreign domination, and seventy-four later than that period.

Egyptian or Phoenician.—Another in the series of mutually subversive articles on the silver basin from Cyprus in the Berlin museum, which Studniczka (*Jb. Arch.* I. 1907, pp. 175 ff.) and others class with Phoenician work of the ninth—seventh centuries B.C., is published by F. W. v. BISSING, *ibid.* XXV, 1910, pp. 193-199 (2 figs.), with new evidence to support his former contention (*ibid.* 1898, pp. 34 ff.) that the object is genuine Egyptian work of the nineteenth dynasty. In technique (beaten work with engraved details) and in some important elements of the decoration, it corresponds exactly with undoubtedly Egyptian work of that time. Von Bissing claims that the mixed style, in which Syrian and Cyprian elements are combined with old Egyptian motives, began in Egypt in the Ramessid period, and not among the Phoenicians.

The History of Mummification.—In the *Proceedings* of the Royal Philosophical Society of Glasgow, Dr. Elliott Smith, for many years Professor of Anatomy in the School of Medicine at Cairo, discusses the history of mummification in Egypt. He thinks the discovery of the possibility of preserving the bodies of the dead was accidental. The shallow pits in hot, dry sand which formed the graves in predynastic times dried the body without allowing it to decay. Moreover the "natron" or salts of soda, which was the chief factor in mummification, existed in enormous quantities in the deserts on both sides of the Nile where the earliest inhabitants buried their dead, and the preservative qualities of this could not long have remained unknown. The oldest mummy in existence dates from the fifth dynasty, and is now in the museum of the Royal College of Surgeons. It

was found by Petrie about twelve years ago at Medum. (*Athen.* March 4, 1911, pp. 255-256.)

The Book of the Dead.—In *J. Asiat.* XVI, 1910, pp. 5-74, E. AMÉ-
LINEAU completes the discussion of the 18th chapter of the Book of the
Dead begun in a previous number of the same journal.

The Egyptian Labyrinth.—In *Ann. Arch. Anthr.* III, 1910, pp. 134-136
(pl.), J. L. MYRES attempts a restoration of the Labyrinth based on the
description of Herodotus.

An Egyptian Funerary Cap.—In *Ann. Arch. Anthr.* III, 1910, p. 137
(colored pl.), R. MOND publishes a funerary cap of the time of Thothmes
IV, found by him in 1906 in the cemetery of Thebes. It is 7 cm. in diameter
and about 1 cm. thick, made of pieces of linen gummed together. On
the top was a lotus flower and on the sides a design consisting of small
rectangles. Red, black, and yellow were the colors used.

Falcon, not Sparrowhawk.—In *Mon. Piot*, XVII, 1909, pp. 5-28 (pl.; 20
figs.), G. BÉNÉDITE publishes a stone falcon of the Saite period recently ac-
quired by the Louvre. Between the legs of the bird is a small standing figure
of a king. The writer shows that the bird of Horus must be identified as the
falcon (*falco peregrinus*), not sparrowhawk as has previously been thought.

The Iron Workers of the Sudan.—In *S. Bibl. Arch.* XXXIII, 1911,
pp. 96 f., A. H. SAYCE shows that mounds of iron slag are found in the
Sudan, chiefly in connection with temples, so that the spot on which the
iron was worked must have been regarded as sacred. There was no copper
or bronze age in central Africa. In Ethiopian tombs and cities the place
occupied by bronze in Egypt is taken by iron. The iron-smith must have
been a more or less sacred personage among the Ethiopians, and the iron
foundry was an annex of their temples. It thus occupied among them
much the same position as that which native tradition ascribes to the ear-
liest sanctuaries of dynastic Egypt.

The Geography of Eastern Africa.—In *Rend. Acc. Lincei*, XIX, 1910,
pp. 489-568, E. SCHIAPARELLI presents a second article on the geography of
Eastern Africa as based on the hieroglyphic monuments. Lists of mines
of gold, silver, lapis lazuli, and various minerals form the subject of this
paper.

Alexandrian Tetradrachms of Tiberius.—A hoard of 198 tetra-
drachms, of which one is of Ptolemy Philadelphus, 61 of Ptolemy Neus
Dionysus, and 136 of the seventh year of Tiberius, is described by J. GRAFTON
MILNE in *Num. Chron.* 1910, pp. 333-339 (pl.), who adds some interesting
conclusions concerning the carelessness of portraiture of the emperor
on Egyptian issues, the recall of the Egyptian coins of Tiberius, and the
rate of wearing out of reverse dies as compared with obverse.

BABYLONIA, ASSYRIA, AND PERSIA

The First Dynasty of Babylon.—In *S. Bibl. Arch.* XXXII, 1910, pp.
272-282, C. H. W. JOHNS publishes a number of chronological data in
regard to the years of the kings of the first dynasty of Babylon, that sup-
plement the publications of Poebel in Vol. 6 of the Babylonian Expedition
of the University of Pennsylvania.

The First Dynasty of Babylon in Berossus.—In *Or. Litt.* XIV, 1911,

cols. 19-21, P. SCHNABEL calls attention to the fact that the second dynasty of Berosus, which corresponds chronologically to the first eight kings of the so-called first dynasty of Babylon, consisted, according to some of the recensions of Berosus, of Medes; but in the Armenian recension they are called *Mar*. *Mar* he regards as a modified form of *Amar*, "Amorite," which corresponds to the established historical fact that the first dynasty of Babylon was Amorite.

Berosus and the Cuneiform Inscriptions.—In *Klio*, X, 1910, pp. 476-494 (2 figs.), C. F. LEHMANN-HAUPT continues his discussion of Berosus and the cuneiform inscriptions (see *ibid.* VIII, pp. 227-251). The restorations proposed for the completion of Column III of the List of Kings by previous writers are all faulty. In the text of Berosus Semiramis is placed in the thirteenth century B.C., whereas it is known from inscriptions that she was the wife of Samsi-Adad, 826-811 B.C., son of Salmanassar III. This points to an error on the part of the epitomizers. Berosus must have included Semiramis in the list of forty-five kings which composed his sixth dynasty, ending with Alexander the Great. Column III should, then, be restored with the names of the first seven kings of Dynasty H, followed by a summary, and then a new dynasty, which he would designate H2, composed of Adadnirari, Salmanassar III, and Assur-dan(kal) followed by a summary. This will fill up the missing twelve lines of the tablet.

Šúzub, King of Babylon.—In *Or. Litt.* XIV, 1911, cols. 62-63, B. MEISSNER cites a passage that furnishes additional evidence that by the name Šúzub two persons are denoted, Mušézib-marduk and Nergalusézib. It records a reward that was paid for the capture of one of the Šúzubs.

The Earliest Mention of Borsippa.—In *S. Bibl. Arch.* XXXIII, 1911, p. 6, A. H. SAYCE publishes a tablet of the period of Dungi, King of Ur, in the Royal Scottish Museum of Science and Art, which mentions "the year when the priest of Borsippa was invested." This is a new date and is the first known mention of Borsippa.

Dada, Patesi of Nippur.—In *Or. Litt.* XIV, 1911, cols. 154-155, L. DELAPORTE publishes a small tablet which shows that Dada, who has hitherto been known only as a *patesi* of Nippur, was a contemporary of Ibi-Sin, King of Ur.

The Mananā Dynasty at Kish.—In *S. Bibl. Arch.* XXXIII, 1911, pp. 98-103, C. H. W. JOHNS publishes Babylonian tablets which show that the accession of Mananā at Kish occurred in the thirteenth year of Sumu-abum of Babylon, and the fall of the dynasty of Kish in the nineteenth year of Sumu-la-ilu.

The Name Sennacherib.—In *Z. Morgenl.* XXIV, 1910, pp. 427-430, H. TORCZYNER shows that the ordinary reading of the name of the Assyrian king Sennacherib as *Sin-ahhē-erba*, and the reading proposed by Ungnad of *Sin-ahhē-riba*, are both incorrect, and that the name should be read *Sin-ahhē-eriba*, and that the ideogram for "city," which is ordinarily read *alu* or *mahazu*, should be read *eri*, which is the value that it has in the name of this king.

A New Fragment of the Creation-Legend.—In *S. Bibl. Arch.* XXXIII, 1911, pp. 6-7, A. H. SAYCE publishes a fragment in the possession of the Royal Scottish Museum of a tablet containing part of the missing portion

of the second book of the Babylonian Creation-Epic. See also S. H. LANGDON, in *Exp. Times*, XXII, 1911, col. 278.

The Hilprecht Fragment of the Babylonian Flood Story.—In *J.A.O.S.* XXXI, 1910, pp. 30-48, G. A. BARTON subjects Hilprecht's publication of a new fragment of the Babylonian flood story to an elaborate criticism, reaching the conclusion that the philology of the tablet, as well as its palaeography, indicates that it is not older than the Kassite period. See also G. A. BARTON in *Ex. Times*, XXII, col. 278; and E. KÖNIG in *Z. Alttest. Wiss.* XXXI, 1911, pp. 133-146.

The Meaning of *Kutaru* in Assyrian Magic.—In *S. Bibl. Arch.* XXXIII, 1911, pp. 62-67, L. W. KING shows that the hitherto obscure *kutaru* in Assyrian magical texts denotes "ceremonial burning." This discovery throws light upon the ceremonial procedure of the Assyrians, and proves that the objects over which separate incantations were repeated were not intended to be burnt separately after the repetition of each formula, but in groups. The burning took place in the *niñakku ša կutari*, or "fumigation bowl," which was a large, flat bowl or tray of metal on which a number of objects were piled up in a heap and burned.

The Bearded Venus.—In *R. Arch.* XVII, 1911, pp. 271-298, MORRIS JASTROW, JR., shows that references to a bearded Ishtar in Assyrian hymns, etc., apply to the star, not to the goddess. The "beard" is formed of rays of light. The bearded Venus of Cyprus, mentioned by Servius and Macrobius, and the one reported by Herodotus among the Pamphylians, was symbolic of strength and virility, not necessarily bi-sexual. The conception of the goddess as bi-sexual appears late in Greek religious beliefs and not at all among Semites. There was no bearded Venus.

The Suffering Righteous One in Babylonia.—In *J. Asiat.* XVI, 1910, pp. 75-144, F. MARTIN discusses the fragments of the Babylonian lyric which contains the lament of a righteous king over the calamities that have befallen him, which bears such a close resemblance to the Book of Job. The text is given in transcription, and there is a precise translation accompanied by an elaborate commentary.

The Babylonian Script among the Hebrews.—In *Z. Morgenl. Ges.* LXIV, 1910, pp. 715-732, E. KÖNIG, maintains, in opposition to the view of Winckler, Jeremias, Benzinger, and much more recently of Naville, that there is no sufficient evidence that Babylonian was the literary language of the Hebrews down to the time of Josiah, or that all ancient Hebrew documents which have come down to us were originally written in Babylonian and afterwards transcribed into Hebrew. On the contrary, he regards it as probable that the Hebrews had a script of their own even before the time of Solomon, although he admits that no direct evidence for the existence of the so-called Phoenician alphabet has been found earlier than 1000 B.C. The theory of Naville that the Book of Deuteronomy was a Babylonian document, deposited in a wall of the Temple in the time of Solomon and discovered in the time of Josiah, and that the reason why Hilkiah the priest and King Josiah could not read it was because it was written in Babylonian, he rejects as an untenable hypothesis.

The Functions of the *Uku-uš*.—In *Or. Litt.* XIV, 1911, cols. 101-106, F. MARTIN shows that the functionary known as the *uku-uš*, who is mentioned repeatedly in old Babylonian inscriptions, must have been some sort

of courier, who journeyed between the fortresses of the king to carry dispatches or to conduct supplies that were being sent to the king or by the king.

The Relative Value of Metals in Babylonia. — In *Or. Litt.* XIV, 1911, col. 106, A. UNGNAD publishes two tablets which show that at the time of the first dynasty of Babylonia the ratio of gold to silver was as 3 to 1, and of silver to iron, as 8 to 1.

Acclimatization of Plants and Animals in Babylonia. — In *Mitt. Vorderas. Ges.* XV, 1910, pp. 476-501, B. MEISSNER gathers passages which show that from the earliest times the kings of Babylonia brought back plants and animals from distant lands which they attempted to acclimatize in their own country. Some of these attempts, as, for instance, in the case of the cedar of Lebanon, were a failure. Others were a success, and considerably enriched the resources of the land. Their example was followed by the Assyrian kings from Tiglath-Pileser onward, who tried to domesticate not only plants, but also foreign animals, such as wild cattle and elephants. All the later Assyrian kings made similar efforts, and to them is due in large measure the introduction of most of the useful plants and fruit trees into Europe.

Sheep-shearing in Babylonia. — In *Or. Litt.* XIV, 1911, cols. 97-101, B. MEISSNER shows that in all lands it was originally the custom to pluck the wool off sheep instead of shearing them. In Babylonia also in the earliest times the verb for gathering wool denotes properly "pluck." The invention of shearing sheep was introduced into Babylonia between 1300 and 600 B.C. and spread rapidly. Doubtless the introduction of iron was the chief reason for the change.

Early and Middle Persian Art. — The March (1910) meeting of the Berlin Archaeological Society was addressed by F. Sarce and E. Herzfeld on old and middle Persian art, illustrated by the plates from their new work, *Iranische Felsreliefs*. The two periods treated, the Achaemenid, ending with the death of Darius III in 330 B.C., and the Sasanid, beginning in 224 A.D., were in substance continuous, the intervening period of foreign rule under the Greek Seleucids and the Parthian Arsacids having made little or no impression on the native Iranian art. This was symbolic and epic in spirit, in contrast to the dramatic character of Greek art, and expressed itself most conspicuously in huge rock sculptures and rock-cut tombs, a custom apparently of Median origin, commemorating the greatness and the victories of the kings. A careful study of these monumental reliefs has enabled the two explorers to fix their relative dates by the development of style and to assign them to their respective subjects. The thirty supporters of the king's throne, in a prayer scene, are accompanied by the names of the subject peoples whom they represent, — an important ethnographic document. (*Arch. Anz.* 1910, cols. 543-548.)

SYRIA AND PALESTINE

The Date of the Exodus. — In *S. Bibl. Arch.* XXXIII, 1911, pp. 46-50, E. W. HOLLINGWORTH finds that there is no adequate evidence that the Exodus of the Hebrews took place as late as the reign of Merenptah. On the contrary, Hebrew tradition assigns the Exodus to a much earlier period.

The Book of Judges contains evidence of Egyptian intervention in Canaan, and shows that the Exodus occurred as early as the reign of Tahutmes II. The oppression by Mesopotamia in Judges synchronizes with the early years of Amenhotep III; the oppression by Jabin synchronizes with the period when Syria was divided between Egypt and the Hittites. The defeat of the Midianites by Gideon synchronizes with the victory of Ramessu III over the league of Syrian tribes.

The Tombs of the Kings in Jerusalem.—In *S. Bibl. Arch.* XXXIII, 1911, pp. 19-25 (5 pls.), P. J. O. MINOS makes a new study of the so-called Tombs of the Kings in the fields north of Jerusalem, reaching the conclusion that they are neither the sepulchres of the kings of Judah nor the tomb of Helena of Adiabene. The bunch of grapes in the decoration indicates the Asmonean kings, who used these symbols on their coins. The egg-and-dart moulding on the entablature is distinctly Roman. He concludes, accordingly, that "the Tombs of the Kings were excavated and used in the first instance by an Asmonean king, and afterwards were used again by one of the Herods."

The Meaning of the Name "Ophel."—In *Pal. Ex. Fund.*, XLIII, 1911, pp. 51-56, C. F. BURNEY maintains that the evidence from the Old Testament shows that the word "Ophel" does not mean "hill," but "fortress" or "citadel," and that the "Ophel" at Jerusalem was originally the fortress or citadel of the City of David, which took the place of the old Jebusite stronghold of Zion. This was added to and strengthened from time to time by succeeding kings.

Yahweh and Jerusalem.—In *Exp. Times*, XXII, 1911, cols. 226-229, A. H. SAYCE shows that in old Babylonian tablets alongside of the male divinity Yau, who corresponds to the Hebrew divinity Yahu, there is also a feminine divinity Yautum, who corresponds to the Hebrew Yahweh. Yahweh was apparently originally a goddess, who was transformed into a god, as were many other divinities of the Semitic world. Now, in another Babylonian tablet the god Uras is equated with Yau, and Ninip is equated with Yautum. From the Tell el-Amarna letters it appears that Ninip = Yautum = Yahweh was a god of Jerusalem. Putting all this together, we may conclude that the original Jerusalem occupied the Temple-hill; that its patron deity was Salim or Sulmanu, who was addressed as "the Most High God"; that Salim was associated with a "Baal," whose temple stood in a neighboring town, and who was already known as both Yau (Yeho), and Yautu or Yahweh (IP and NIN-IP) before the Israelitish conquest of Canaan; and that the Old Testament is right when it says (Gen. 4:26) that the name of Yahweh was known even in the antediluvian age.

The Site of Gibeath of Saul.—In *Pal. Ex. Fund.*, XLIII, 1911, pp. 101-109 (pl.), F. W. BIRCH seeks to show that the mound of Adaseh or Adeseh was the site of the Biblical Gibeath. In reply to this, D. MACKENZIE reports (*ibid.* XLIII, 1911, pp. 97-100) that an investigation of the site shows that Adasa cannot possibly be Gibeath, because the remains on the spot show that it was not a pre-Christian site.

The Site of 'Ain Shems.—In *Pal. Ex. Fund.*, XLIII, 1911, pp. 69-79 (3 figs.; pl.), D. MACKENZIE reports the physical features of the Mound of 'Ain Shems, and from the superficial indications discusses the probabilities as to what the excavations will yield.

Origin of the Aramaeans.—In *S. S. Times*, LIII, 1911, p. 139, A. UNGNAD discusses the origin of the Aramaeans, or Syrians, in the light of Babylonian, Assyrian, and Biblical evidence.

A Palestinian Bibliography.—The first volume of Thomsen's invaluable Palestinian bibliography included all the publications between 1895 and 1904. The second volume, which has just appeared (*Die Palästina-Literatur, — Eine Internationale Bibliographie in systematischer Ordnung mit Autoren- und Sachregister, bearbeitet und herausgegeben von Peter Thomsen. Zweiter Band, Die Literatur der Jahre, 1905—1909.* Leipzig, 1911, J. C. Hinrich'sche Buchhandlung), includes publications between the years 1905 and 1909. Here, under the heads of General Literature, History, Historical Geography and Topography, Archaeology, Geography, and Palestine of To-day, with numerous subheads under each of these divisions, all the books and magazine articles in all languages that have anything to do with Palestine or its history have been gathered in the most painstaking fashion. Scholars cannot be too grateful for the self-sacrificing labor that is put into such a volume. It is an indispensable aid in all branches of Palestinian research.

The Princeton Expedition to Syria.—In the *Publications of the Princeton University Archaeological Expedition to Syria in 1904—1905*, Division II, Section A, Part 2 (Leyden, 1909, E. J. Brill, pp. 63—148; Appendix, pp. i—xxv; 4 pls.; 93 figs.; map), HOWARD CROSBY BUTLER continues his discussion of the architecture of Southern Syria by describing the remains of the more important buildings on sixty-six different sites in the Southern Hauran. Like the parts already issued, this contains an abundance of plans, restorations, and photographic reproductions of the different ruins. In Division III, Section A, Part 2 (pp. 21—129; Appendix, pp. i—xxviii; 5 pls.; 249 figs.; map), ENNO LITTMANN, DAVID MAGIE, JR., and D. R. STUART publish 217 Greek and Latin inscriptions from the same district. The most important is a long imperial edict from Koṣer il-Hallabat, of which 68 pieces were found, but which is still far from complete. HOWARD CROSBY BUTLER adds a description of Trajan's road from Boṣra to the Red Sea in connection with the publication of the milestones found along its course.

The Funerary Eagle of the Syrians.—In *R. Hist. Rel.* LXII, 1910, pp. 119—163 (pl.; 28 figs.), F. CUMONT calls attention to a number of grave stelae found at Hierapolis, at Balkis on the Euphrates, and elsewhere, upon which an eagle is carved, above the inscription, holding a crown in his claws. He shows that the eagle is supposed to transport the soul of the dead to the stars. When a Roman emperor was deified, his body was burned and an eagle released from the top of the pyre. The Romans got this idea of the eagle from the Semites. It can be traced back to the Etana myth in Babylonia.

Some Graeco-Phoenician Temples.—A study of Phoenician temples and cult statues, as a contribution to the study of religions, is made by G. H. HILL (*J.H.S.* XXXI, 1911, pp. 56—64; 2 pls.), from the coins of the chief cities of Phoenicia and in the Graeco-Phoenician and imperial periods. The Oriental divine pair, more or less hellenized, appears both with marine and with celestial attributes, their original distinction as the gods of a seafaring and of an inland or mountain people having been to a large extent obliterated. Zeus-Baal, Poseidon, Adonis, Melquarth, Astarte, Europa, the Dioscuri, city goddesses, and others, appear in various forms. Some of the

smaller shrines are on wheels or fitted with carrying poles, and contain only the bust of the goddess.

ASIA MINOR

The Hittites in the History of Art. — In *Sitzb. Mün. Akad.* 1910, No. 13 (112 pp.; 32 figs.), F. v. REBER discusses the place of the Hittites in the history of art. A general historical discussion shows that the centre of Hittite power was in Cappadocia. The Hittites seem to have been of Armenian origin. Their power lasted from the eighteenth to the twelfth century B.C., and their history can be traced both earlier and later. The architecture of Boghazkeui (Chatti) and Sendschirli (Samal) is described in detail. In plan and decoration the Hittite palace influenced Assyrian and other Oriental architecture. Sphinx-pedestals for columns and lions beside doorways are examples of such influence. The hieroglyphics and the earliest relief sculptures of the Hittites show no Egyptian influence. They brought their writing and their art with them to Cappadocia. The sculpture of Üyük is more naive, more childlike, and livelier than that of Sendschirli, though they may be in the main nearly contemporaneous (perhaps earlier than the thirteenth century). In later times, after the Hittites came into conflict with their conquerors, the Assyrians, their art was under Assyrian influence. The propylaea of Sakje-Geuzi (cf. Garstang in *Ann. Arch. Anthr.* 1908; *A.J.A.* XIII, pp. 350 f.) is ascribed to the time of the Sargonids (seventh century B.C.).

Hittite Notes. — In *S. Bibl. Arch.* XXXIII, 1911, pp. 43-45, A. H. SAYCE discusses Hittite texts in which he finds the names *Gurgum*, *Bit-Adin*, *Bit-Agusi*, and *Midas*.

A Hittite Seal Cylinder. — In *S. Bibl. Arch.* XXXII, 1910, pp. 268-271 (2 pls.), ALICE GRENFELL publishes a seal-cylinder in the Ashmolean Museum, which depicts cratera with curved tubes for the sacramental sucking of the wine, and between them the cones of bread that were also eaten as part of the ceremonies. This throws light upon the seal from Kara Eyuk, published by Sayce, *ibid.* XXXII, 1910, pp. 177 f.

A Lycian Headdress. — In *J.H.S.* XXXI, 1911, pp. 119-123 (7 figs.), H. R. HALL compares the foreign-looking figure of a woman found as a hieroglyph on the Phaestus disk, with a similar figure in gold plate from a shaft grave at Mycenae, and the tall feather-like crown in the hieroglyph of a man's head, with headdresses worn by Philistines, Cypriotes, and others in various representations, especially the defenders of a besieged city on the fragment of a silver cup found at Mycenae. He infers that the feather crown was, as Herodotus testifies, a Lycian headdress; that the siege scene on the silver cup represents a Lycian or Carian city attacked by Mycenaeans; that the tall headdress was adopted from the Lycians by various neighboring peoples; and that the high crest sometimes found with it was taken over by the Greeks from Caria, as tradition says.

Dead Cities of Asia Minor. — Under the title *Villes mortes d'Asie Mineure* (Paris, 1911, Hachette et Cie., 233 pp.; 8 maps and plans; 43 figs.; 4 fr.), FÉLIX SARTIAUX publishes a general account of the cities of Pergamon, Ephesus, Priene, Miletus, Didyma, and Hierapolis, in the light of modern excavation.

Coinage of Adramytium. — In *Nomisma*, V, 1910, pp. 10-24 (pl.), H. von

FRITZE subjects the pre-imperial coinage of Adramytium to a critical examination as regards the dates and relations of the issues.

Forgeries from Caesarea Mazaca. — F. W. HASLUCK warns collectors against some recent forgeries of silver coins purporting to emanate from Caesarea Mazaca (*Num. Chron.*, 1910, pp. 411-412; 4 figs.).

Building a Skeleton. — In *R. Ét. Anc.* XIII, 1911, pp. 162-164 (fig.), C. DUGAS publishes an *antaglio* found on the island of Samos, and now in Smyrna, on which a seated man with hammer in hand is building a skeleton. He argues that this does not represent Prometheus, but a scene from everyday life; that wooden skeletons were carried about at dinners, as a sort of *memento mori*, like the small bronze ones which have actually been found.

GREECE

ARCHITECTURE

Athenian Buildings. — In *Ath. Mitt.* XXXVI, 1911, pp. 39-72, W. DÖRPFELD discusses and criticizes a number of recent works on the architectural and topographical problems of the buildings on the Athenian Acropolis. (1) *The Erechtheum and the old Athena Temple*. Stevens' restoration of the east wall of the Erechtheum (*A.J.A.* X, 1906, pp. 47 ff.), an article on the Metopon in the Erechtheum (Caskey and Hill, *A.J.A.* XII, 1908, pp. 184 ff.), and Schrader's theory that the old temple as enlarged by Pisistratus had Ionic columns in the pronaos and opisthodomos and an Ionic frieze along the top of the cella wall (*Ath. Mitt.* XXX, 1905, p. 305) are approved. Petersen's treatment of the Erechtheum-Old Temple problem ('die Burgtempel der Athenaia') is criticized at length, and rejected. (2) *The Parthenon*. The discoveries of Hill in regard to the earlier Parthenon (as yet unpublished; see *A.J.A.* XV, 1911, p. 75) are briefly described, and their results accepted. (3) *The Propylaea*. The work of H. D. Wood and W. B. Dinsmoor (only partially published; see Dinsmoor, *A.J.A.* XIV, 1910, pp. 143 ff.) is accepted. The question as to the paintings in the northwest wing is briefly discussed (see *Ath. Mitt.* XXXVI, 1911, p. 87; *A.J.A.* XV, 1911, p. 546). The resemblances between this building and the Erechtheum suggest that they were built at the same time, perhaps by the same architect. The suggestion is made that the Pinacotheca was designed as a sanctuary. The pillars upon which the statues of horsemen stood are constructed as Doric antae, showing that in the original plan the Propylaea was to be continued further to the west. (4) *The Temple of Nike*. Articles by Köster (*Jb. Arch.* I. XXI, 1906, p. 129) and Petersen (*ibid.* XXIII, 1908, p. 12) are unfavorably criticized. (5) *The Choregic Monument of Nicias*. The work of Dinsmoor (*A.J.A.* XIV, 1910, pp. 459-484) is praised, that of Versakes (*Eph. 'Apx.* 1909, pp. 211-238) condemned. (6) *The Chalcothece*. The restoration by Versakes (*Eph. 'Apx.* 1909, pp. 211 ff.; *A.J.A.* XIV, p. 497) is rejected. (7) *The Asclepieum*. The work of Versakes (*Eph. 'Apx.* 1908, pp. 25 ff.; *A.J.A.* XIII, 1909, p. 490) is severely criticized. (8) *The Pelargicon*. A theory recently announced by Köster (*A.J.A.* XIV, 1910, p. 232) is criticized, and a brief statement of the theory held by the writer is given.

The Portico of Philip at Delos. — In *C. R. Acad. Insc.* 1911, pp. 214-221 (2 plans) R. VALLOIS discusses the Portico of Philip at Delos, now in

ruins down to its foundations. It was 71.75 m. long, and 11.15 m. wide. At each end of the façade, on the east side of the building, was a wall pierced by windows, and between the antae of these walls were sixteen Doric columns placed at a distance of 3.35 m. The inscription *Βασιλεὺς Μακεδόνων Φίλιππος βασιλέως Δημητρίου Ἀπόλλωνι* covered blocks 8 to 13 of the architrave. The missing fourteenth block probably had the word *διεθῆκεν*. The frieze covered only the front half of the architrave. Above was a cornice with gargoyles placed in the axes of the columns. The construction is careful; the blocks are fastened by clamps run in lead. The columns were 5.915 m., or six and one-half modules high, *i.e.* twice the height of the entablature (2.95 m.). The enclosed spaces at the ends of the building held dedicatory statues; the base of a statue of Sulla still stands in the southern end. At a later date the portico was more than doubled in size. It was made twice as wide, with twenty-five Doric columns of the same dimension as those on the east side placed along the west front. At the north end in a line with the back wall of the original portico was a colonnade of four Ionic columns, of the same height as the Doric columns, placed between antae in the form of half columns. This reconstruction dates from about 150 B.C.

The Tholos of the Treasury of Sicyon. — In *B.C.H.* XXXV, 1911, pp. 132-146 (pl.; 18 figs.), F. COURBY discusses the blocks built into the foundations of the treasury of Sicyon at Delphi with special reference to the study of these remains by Pomtow (*Zeitschrift für Geschichte der Architektur*, III, 1910, pp. 97-143, 153-192). The thirteen curved architrave blocks rested on a wall, not on columns, and consequently the 18 to 20 columns of which there are remains cannot be connected with them. The four flat architraves are of different dimensions. The metopes over the curved architraves were 0.57 m. wide, those over the flat architraves 0.875 m. to 0.905 m. The sculptured metopes belong to the latter series only. Thus the theory of Pomtow that all the blocks belong to one building, a *Tholos* with a rectangular prodomos, must be discarded.

Architectural Terms. — Three architectural terms occurring in Delian inscriptions are explained by F. COURBY in *B.C.H.* XXXIV, 1910, pp. 501-507. (1) *Προπνέμεις θύραι*. This term in inscriptions referring to the temple of Apollo designates the doors in the prodomos and opisthodomos which were closed by grilles. (2) *Χονικίδες*. The fact that these are sometimes mentioned in pairs and that the main door of the temple of Apollo was furnished with eighty-eight of them shows that the term applies to the pivot as well as to the socket. Each valve of the door had twenty-two hinges, one in the sill, one in the lintel, and twenty placed along the jamb. (3) *Δάκτυλα*. This term used in connection with the *προπνέμεις θύραι* of the temple (*τὰ δάκτυλα τὰ διαγεγραμμένα ἐπάνω τῶν θυρῶν*) designates a grille or "imposte fixe" placed above the doors.

String Courses below Frescoes. — Certain small cornice-like mouldings found in the sanctuary of Athena at Pergamon belong to the stoa of the sanctuary and originally marked off the lower part of the rear wall which was of marble from the upper part which was of a different material and was covered by stucco or frescoes. A similar arrangement occurs on walls of the first style at Pompeii. Here the lower wall consists of a course of *orthostatai* and two courses of wall blocks surmounted by a moulding.

Above the latter the wall is painted a uniform color. In the Pinacotheca of the Athenian Propylaea a narrow band of Eleusinian stone forms a similar division. The upper part of the wall which was not smoothed was intended to receive fresco paintings upon a coating of stucco. (W. DÖRPFELD, *Ath. Mitt.* XXXVI, 1911, pp. 87-96; 4 figs.)

SCULPTURE

Conventions in Primitive Art. — In *R. Et. Gr.* XXIII, 1910, pp. 379-401 (10 figs.), W. DEONNA shows that there existed in primitive art certain conventions which have not been rightly understood. Thus a triangle might be used to represent the human body, the head, the nose, the foot, the beard, or, when the upper part was curved, the eye. Two isosceles triangles were used for the hair, as in the Nicandra statue. Another convention was the use of the rectangle, especially to represent a draped figure, which explains the beam and pillar-like statues of women. The primitive figures ending in a point have left a trace in later art, for example, in the statue by Antenor on the Acropolis. The early manner of representing the ear may also be found in later art.

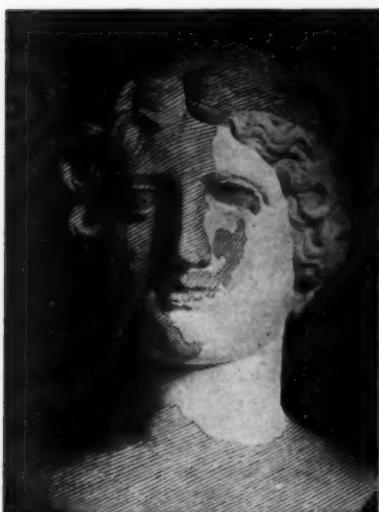


FIGURE 1. — MARBLE HEAD IN STOCKHOLM.

set straight on the shoulders but inclined slightly forward. Only the back hair with a confining net and holes for attaching a crown, and the left cheek, chin, and eye are preserved, but when the rest is filled out with plaster the effect of serene and noble loveliness is entirely consistent with what is known of other Parthenon fragments. From the measurements, this seems to have been placed slightly farther from the middle than the Laborde head.

The Date of the Athena Parthenos. — In *R. Et. Anc.* XIII, 1911, pp. 125-136, H. LECHAT discusses the article by L. Pareti in *Röm. Mitt.* XXIV, pp. 271 ff. (*A.J.A.* XV, p. 229) concluding that the traditional view that the Parthenos was set up in 438 is correct, and that the Zeus at Olympia was made after the Parthenos.

A Parthenon Head. — A fragment of a Greek marble head in the Royal Museum at Stockholm (Fig. 1) is tentatively ascribed by J. SIX (*J.H.S.* XXXI, 1911, pp. 65-71; 2 pls.; 5 figs.) to the pediments of the Parthenon, although the neck does not fit any of the existing torsos. It is a female head,

The Statuette of Athena at Amalia.—At an open meeting of the Austrian Archaeological Institute in Athens, February 15, 1911, A. Schober discussed the torso of a statuette of Athena wearing the aegis found on the site of the city of Elis and now preserved in the village of Amalia. It is of pure white fine-grained Pentelic marble, which has acquired a light yellow tint in the course of time. The head, the left fore-arm and part of the right arm are gone; the rest is well preserved. The preserved part is 0.73 m. high; breadth of shoulders 0.24 m.; height of plinth 0.04 m. The part of the neck remaining shows that the head was turned slightly to the right. The weight is thrown chiefly upon the left leg, which stands firm, while the right leg, relieved of the weight, is slightly advanced. The drapery is very elaborate. First the figure wears a chiton with short sleeves, above which is a peplos of coarser material girt below the breast with a simple cord, while a mantle is loosely cast over the left shoulder. The gorgoneion and the scales of the aegis were not represented plastically, but were painted. Traces of red paint are still to be seen in various places. The work displays technical mastery and a very careful hand, especially observable in the folds of the drapery and in the distinction between the different kinds of material. The flesh parts are polished until they have acquired a smooth and mirror-like surface. This torso helps to explain a series of replicas which recently have been much discussed, viz., the Medici torso and the two large replicas in Seville, all of which are copies of a celebrated work of the fifth century B.C. Hermann, the finder of the Seville figures, brings them into relation with Agoracritus, the chief disciple of Phidias, while Amelung, with the aid of Attic coins and of a relief from Ambelokipi (preserved only in a drawing), connects them with Phidias himself, and considers that the Parthenos was the original. The occasion for the making of this replica for Elis is not known, but the statuette is certainly of Attic import, as is seen not only from the workmanship, but also from the material.

The Head of an Athlete.—In *Ath. Mitt.* XXXVI, 1911, pp. 193-197 (pl.), A. SCHOBER publishes a marble head of an athlete in the National Museum at Athens (461 in the catalogues of Kavvadias and Kastrites). It is presumably a careful copy of a bronze original of the middle of the fifth century and of the Attic school, related to, but somewhat later than,



FIGURE 2.—POLYCLITAN HEAD IN THE
BRITISH MUSEUM.

the Riccardi and Perinthus heads, both of which the writer holds to be Myronian.

A "Polyclitan" Head in the British Museum. — In *J.H.S.* XXXI, 1911, pp. 21-30 (2 pls.; fig.), E. A. GARDNER publishes and briefly discusses a marble head found at Apollonia in Epirus and now in the British Museum (Fig. 2), together with the various types of statues and heads in which Polyclitan elements have been noted. This head, though a distinctly finer work, sufficiently resembles that of the Westmacott athlete to have its missing portions supplied by casts from that head, and the marked departure of both from the Polyclitan canon of proportions, especially in refining the lower part of the face, is much the same. The motive, as indicated by the raised right arm of the Barraco replica, may well have been a victor crowning himself. On the whole, the head seems to be an Athenian work of the early fourth century, freely imitating in marble a fifth century athlete type which had been expressed in bronze by Polyclitus or his pupils.

A Female Head in the Louvre. — In *Mon. Piot*, XVII, 1911, pp. 139-143 (2 pls.; fig.) M. COLLIGNON publishes a female head of Parian marble acquired by the Louvre in 1907. It is greater than life size, and was intended to be set into a body made separately. He thinks it a contemporary copy of a work by an Attic sculptor of the early part of the fourth century B.C.

Old and New Niobids. — In *Z. Bild. K. N. F.* XXII, 1911, pp. 129-138 (19 figs.), B. SAUER shows that the Niobids discovered in recent years, that is, the dying daughter in Milan, and the fleeing daughter and dying son in Copenhagen, date from the fifth century B.C., and thus belong to an older group than the Niobids at Florence. In style they closely resemble the sculptures of the "Theseum" at Athens and an Athena from Pergamon in Berlin. The author of all these sculptures was a pupil of Myron, perhaps his son Lycius.

The Maiden of Antium. — In *Burl. Mag.* XVIII, 1911, pp. 13-17 (2 figs.), E. LOEWY argues that the much discussed maiden from Antium (*A.J.A.* VIII, p. 307; XI, pp. 356, 460; XII, p. 224; XIV, pp. 222, 504) certainly represents a young girl. Like many other statues it was made to be seen from one point of view, in this case from the right, as is proved by the better workmanship, by the use of two kinds of marble for the two arms, and by the cut of the plinth. It is only when seen from the left that the head resembles that of a boy. He thinks that the statue was made about 300 B.C., but as yet he cannot attribute it to any known sculptor.

Euphranor. — In *Jb. Arch. I.* XXV, 1910, pp. 159-173 (3 pls.; 5 figs.), Miss M. BIEBER gives reasons for believing the bronze youth from Anticythera to be a copy of the Paris of Euphranor, as already suggested by Loeschke and Stais, and discusses the position and characteristics of this artist as midway in development between Polyclitus and Lysippus. A large number of fourth-century heads, which show some resemblance to the work of Praxiteles and Scopas, she ascribes to their less gifted and less original contemporary.

The Heracles Epitrapēzios of Lysippus. — In *R. Arch.* XVII, 1911, pp. 257-270, CHARLES PICARD discusses the Heracles Epitrapēzios of Lysippus. Martial (*Ep.* IX, 43 and 44) does not intend to say that the bronze he describes has passed through the hands of Alexander, Hannibal, and Sulla. Statius (*Silv.* IV, 6) enlarges upon Martial. The figure was a Tyrian Hera-

cles. (Hesychius: Εὐφράδης· Πάταικος ἐπιτραπέζιος. Τιγγρών, οἱ δὲ Γιγῶν· Πάταικος ἐπιτραπέζιος· οἱ δὲ Αἰγύπτιον Ἡρακλέα. Πάταικοι· θεοὶ Φούκες, οὓς ιστᾶσι κατὰ τὰς πρύμνας τῶν νεῶν.) The "Alexander with a Lance" may be dated about 334-333 B.C., the Heracles Epitrapezios a little later. It was probably a youthful Heracles, with the features of Alexander. Possible copies are two marble statuettes in the Louvre and a fragmentary marble statuette found in 1904 in the establishment of the Poseidoniasts of Berytus at Delos.

Agasias. — In *B.C.H.* XXXIV, 1910, pp. 538-548 (13 figs.), C. PICARD publishes, with facsimiles, thirteen inscriptions found at Delos with the signature of the sculptor, Ἀγασίας Μηνοφίλου Ἐφέσιος. (Nos. 1-4 = Loewy, *Inschr. griech. Bildhauer*, Nos. 287-290; Nos. 10-13 previously unpublished.) The statue of Billienus (No. 1) was probably executed before the year 100 B.C., that of Aropus (No. 7) about 91/90 B.C. Agasias collaborated with a certain Eutychides, who is dated about the close of the second century B.C. Many of the statues by Agasias, for the most part portraits of Romans, were overthrown during the sack of Delos by Pontic troops, and later restored by Aristandros, son of Scopas, a Parian (cf. Nos. 1, 2, 4, 8).

The Warrior of Delos. — In *B.C.H.* XXXIV, 1910, pp. 478-500 (2 pls.; 7 figs.), G. LEROUX supports the arguments of Wolters (*Ath. Mitt.* XV, 1890, pp. 188 ff.) that the pedestal with the signature Ἀγασίας Μηνοφίλου Ἐφέσιος cannot belong to the statue of the warrior of Delos. The metrical inscription mentioning Philetaerus and the sculptor Niceratus, brought into connection with the statue by Wolters, must also be rejected, since it is now shown to have belonged to a long, narrow pedestal which supported a row of bronze statues. Two fragments of the statue of the warrior have recently been discovered, the left shoulder and upper arm and a fragment of the chest with remains of the baldric. A marble head of a Gaul in the museum at Delos, which has been held to be that of the warrior, is too small (see *A.J.A.* XIV, 1910, p. 505). Another head, found in 1905, is too large and too realistic in style to be connected with the statue.

Portrait of Heraclitus. — A statue in Candia, found at Gortyna and published by Mariani (*A.J.A.* I, 1897, pp. 279 ff.) is to be identified as a portrait of Heraclitus from its resemblance to a statue of that philosopher represented on late coins of Ephesus. The marble in Candia is a poor copy, executed about 200 A.D., of an original of the late fifth or early fourth century. The knotted staff which the figure held with the left hand was transformed by the copyist into a club. The same mistake was made by the engravers of the coins on which the attribute is held in the arm. (G. LIPPOLD, *Ath. Mitt.* XXXVI, 1911, pp. 153-156; pl.; fig.)

The Frieze of the Treasury of "Cnidos" at Delphi. — In *R. Arch.* XVII, 1911, pp. 197-220 (4 figs.), FERNAND COURBY discusses the frieze of the treasury of "Cnidos," especially Heberdey's theories concerning it (*Ath. Mitt.* 1909, pp. 145-166; cf. Karo, *ibid.* pp. 167-168, and *B.C.H.* XXXIV, 1910, p. 210). He finds that the fragments ascribed by Homolle to this treasury really belong to one building, but Homolle's arrangement of them is incorrect. The eastern front contained ten deities. The Aphrodite of the western frieze is putting a necklace about her neck; the Athena is putting on her aegis. Each is acting in accordance with her nature.

The Treasury of the Siphnians. — In *Jh. Oest. Arch. I.* XIII, 1911,

Beiblatt, cols. 277-280, A. SCHOBER discusses further the dimensions of the slabs of the treasury of the Siphnians (see *ibid.* cols. 81 ff., and *A.J.A.* XV, p. 227), and shows that the length of the frieze corresponds with that of the building south of the Sacred Way, commonly known as the Treasury of the Siphnians. He also argues that in the gigantomachy the Athena slab should take the place of the Cybele slab in Homolle's arrangement. On the left of it was the opponent of Hephaestus and on the right, Ares and then Cybele.

The Frieze of the Monument of Aemilius Paulus.—A detailed study of the costumes and armor of the figures on the frieze of the monument of Aemilius Paulus at Delphi makes it possible to distinguish the troops which fought on the Roman side at the battle of Pydna from those which served under Perseus. On all four faces of the pillar Roman and Samnite horsemen and Samnite foot soldiers are engaged with Thracian cavalry and Macedonians, identified by their elaborately decorated bronze shields ($\chiαλκόπλετοι$). The frieze represents scenes from the opening skirmish on the banks of the stream Leucus, started, according to Livy, by a horse which escaped from the Roman camp and crossed the stream. The representation of this runaway horse on the north face of the frieze establishes the authenticity of the tale, which is not found in the Macedonian version preserved by Plutarch. The pillar is the one mentioned by Plutarch (*Aem.* 28, 2) as begun by Perseus and destined to support a golden statue of himself. (A. J. REINACH, *B.C.H.* XXXIV, 1910, pp. 433-468; 9 figs.)

The Dionysus of the Janiculum.—The statue of the young Dionysus which was found in the sanctuary of the Syrian gods on the Janiculum in 1908 (see *A.J.A.* XIII, 1909, pp. 361-362; XIV, 1910, p. 116; XV, 1911, p. 98), was described and warmly praised by A. Trendelenburg at the November (1909) meeting of the Berlin Archaeological Society. He dates the original in the fourth century B.C. and thinks that the gilding on face and hands must have come from the hair and the thyrsus, as such partial gilding of a nude statue seems impossible. (*Arch. Anz.* 1910, cols. 520-523.)

The Identification of the Figures of the Pergamon Reliefs.—In *Hermes*, XLVI, 1911, pp. 217-249 (8 figs.), C. ROBERT proposes several new interpretations for the figures of the reliefs from the great altar at Pergamon. Puchstein's Oceanus and Doris he thinks should be identified as Hephaestus and Eurynome, a sea goddess. PY, on a piece of the cornice, seems to belong to this name. The deities on the right of the stairs have to do with Dionysus, and NY should be restored as $\text{Νύ}[μφαι]$, and Σ as [$\Sigma\lambdaηνός$]. Puchstein's Rhea is probably to be identified as Semele (the two broken letters of the name probably being ΕΛ), while the real Rhea is the goddess riding on a lion just around the corner. The eagle with the thunderbolt behind her symbolizes her relation to Zeus. In front of Rhea are Oceanus and Tethys, who, with Astraeus and Eos, are in combat with the giant Achelous. The god struggling with the lion-headed giant is Pallas, and the winged god next to him is his brother Perseus. On the northeast corner are the three Fates, partly identified through the inscriptions $\text{Κλώθ}[ω]$ and [$\text{Ἄτρωπ}]\text{ος}$. Between Night and the Fates were Callisto, Heniochus, and Ophiuchus struggling with a giant. Night, her three daughters, and the stars thus occupied most of the northern side of the altar. On the eastern side Heracles must have occupied four slabs and his wife Hebe one. Then came her mother, Hera, the first letter of whose name still remains.

The letters **BH** should be restored as [^τ**H**]βη. Beyond Hera was a chariot, Iris, Hermes, and their opponents. Of the fragmentary inscriptions, **EY** should be restored as **Ev[ρος]**, the name of one of the winged horses of Iris. **NYΩ** must be restored [^τ**E**]νυώ. This was probably a diminutive figure on block **ΔY**, *i.e.* near Ares. On the missing slab between the Zeus and Athena groups was Athena's owl fighting against the same giant as the eagle of Zeus.

Reliefs on Public Decrees.—At an open meeting of the Austrian Archaeological Institute in Athens, February 15, 1911, Dr. Walter discussed the reliefs on public decrees. One stele relating to tribute paid to Athens has a relief representing Athena seated by a heap of sacks and amphorae. Cities are represented by divinities, as Athena for Athens, Hera for Samos, the Parthenos for Neapolis in Thrace, Heracles for Heraclea, Aphrodite for Cnidus, Apollo for Apollonia; or by animals, as a ram for Clazomenae, a horse for Syracuse, etc. These reliefs are important for the history of sculpture because they can usually be dated.

A Hellenistic Relief at Genoa.—A Hellenistic relief in the Palazzo Bianco at Genoa is described by G. E. Rizzo in *Röm. Mitt.* XXV, 1910, pp. 298-304 (pl.). Athena is represented spurning the offer of a flute from a satyr. The source is probably Asia Minor, the date second century A.D.

A History of Greek Sculpture.—An important contribution to the series of handbooks issued by the American Book Company is Professor Richardson's *History of Greek Sculpture*. In the space of 280 pages he gives a concise account of the subject from Mycenaean times to the Hellenistic period, introducing much more detail than would be thought possible in so small a compass. The illustrations are good, and include a number which have not yet generally found their way into the handbooks. (*A History of Greek Sculpture*. By RUFUS B. RICHARDSON, formerly Director of the American School of Classical Studies at Athens. New York, 1911, American Book Company. 291 pp.; 131 figs.)

A Reminiscence of Alcibiades.—In *'Ανεξάρτητος Ἀθηνῶν*, I, 1911, pp. 52, 59, 67-68 (3 figs.), I. N. SVORONOS publishes a carved block of marble, 0.35 m. high, 1.51 m. long, and 0.32 m. wide, found about fifty years ago in the so-called Valerian wall east of the Tower of the Winds. On the top is a cutting which once supported a stele. On the best preserved of the two long sides were eight unbridled horses in pairs, each with a groom. Those at the right have been destroyed, and part of the pair at the left. On the narrow end which is best preserved is a race horse facing to the right; the other end has been broken off. On the other long side, which was originally the front, were about nine standing figures. All are badly hammered, but three men wearing the chlamys can still be made out, one apparently in the act of crowning himself. The stone may be dated from the style of the figures in the latter part of the fifth century. The writer argues that upon this base once stood a stele commemorating the Olympic victories won by Alcibiades in 420 B.C. and his victories at Delphi and Nemea. (See also *Tὸν Ἀθηναῖον Εθνικὸν Μουσεῖον*, pp. 464-469; 3 figs.)

The Bronzes of Mahdia.—In *Mon. Piot*, XVII, 1909, pp. 29-57 (3 pls.; 5 figs.) A. MERLIN and L. POINSSOT discuss several of the bronzes found in the sea off Mahdia (*A.J.A.* XIII, pp. 102 f., 374; XIV, pp. 248, 388 f.; XV, pp. 112 f.). 1. The large Eros they think is a contemporary copy of an

Eros holding his bow by Praxiteles, described by Callistratus, an identification since confirmed by the finding of the missing left arm with the bow (see *A.J.A.* XV, p. 113). 2. The Dionysus of Boethus shows that the artist could reproduce with a certain amount of liberty an archaic figure like the Hermes Propylaeus of Alcamenes, and likewise shows his skill in emphasizing striking details. 3. The two cornice heads belong together and represent Dionysus and Ariadne. They are of Hellenistic date, but the purpose for which they were intended is not clear. 4. The statuette of an Hermaphrodite engaged in a torch race was used as a lamp. The head and upper part of the body held oil which ran down through the arm into the torch in the left hand. The origin of the type may be found in the Hermaphrodite carrying a torch in certain Dionysiac scenes. 5. An Eros found in 1909 is very similar to the Hermaphrodite and was used for the same purpose. In *C. R. Acad. Insc.* 1911, pp. 206-210, A. MERLIN and L. POINSSOT argue that the bronze cornices found in the sea near Mahdia originally decorated one of the sacred triremes of Athens. Three of the five inscriptions found in the wreck were originally set up at the Piraeus in sanctuaries dedicated to the heroes for whom the two sacred triremes were named. The writers argue that among the spoils carried off from Athens by Sulla were the decorations of the two sacred triremes, as evidence to the Romans of the complete subjugation of Athens.

Kneeling Worshippers.—In *Jh. Oest. Arch. I.* XIII, 1911, Beiblatt, cols. 229-244 (10 figs.), O. WALTER publishes a series of nine Attic reliefs of the fourth century B.C., in which a worshipper kneels on the ground before a divinity. He shows that the deities represented are chthonic and the object of the kneeling was to get as near the god as possible. The Greeks usually prayed standing.

A Bronze ἄγντρης.—In *Jh. Oest. Arch. I.* XIII, 1911, pp. 167-175 (3 figs.), P. DUCATI publishes a bronze statuette in Bologna representing a man with coarse features, almost nude, dancing and playing the castanets. He argues that it represents an ἄγντρης, or mountebank, and is of Roman date, influenced by the so-called Alexandrian art.

Two Marbles in Candia.—In *R. Arch.* XVII, 1911, pls. VI and VII reproduce by the Lumière (of Lyons) process of color photography two marbles in the museum at Candia (*Jh. Oest. Arch. I.* VI, 1903, pl. I and p. 9; *A.J.A.* 1897, p. 274). The photographs were made by the Abbé Archambault. In the text, by S. REINACH (pp. 433-435), the results of the process are criticized.

VASES AND PAINTING

Late Minoan Vase Painting.—Some Cretan vases from Cyprus in the British Museum are published by E. J. FORSDYKE in *J.H.S.* XXXI, 1911, pp. 110-118 (5 figs.), with reflections on the historical connection of Minoan and Mycenaean art. He suggests that at the end of the prosperous period in Crete known as Late Minoan I, the encroachments of Knossus drove the inhabitants of many lesser towns across the seas to settle in Greece, Rhodes, and elsewhere; that their descendants preserved the naturalistic art which they brought with them in a degenerate form contemporary with, but unaffected by the brilliant Later Palace style of Knossus in Late Minoan II; and returned to overthrow their old enemies and restore their old homes in

Late Minoan III, bringing with them the technically advanced but artistically inferior style of pottery which at that time seems to revive in Crete the motives of Late Minoan I. The shaft graves of Mycenae would then belong to the time of the great migration, and the later tholos tombs, containing genuine imported Minoan pottery, indicate a continued intercourse of the nobles only with the mother country, not of the people. Cyprus seems, however, not to have been colonized directly from Crete, but indirectly from the Minoan centres of Rhodes or other places.

Mycenaean Rhytons.—At an open meeting of the German Archaeological Institute in Athens December 7, 1910, G. Karo tried to explain the silver bull's head and the lion's head of gold from Mycenae as rhytons. On the former the double axe above the horns is a false restoration, as the steatite head from Cnossus shows. The Cretan head is clearly influenced by metal technique, and belongs to the same period and was made under the same influence as the Mycenaean head. The golden lion also has its Cretan analogy in marble. Like the pointed Cretan vase, illustrated by the fresco of the professional cup bearers, which most probably had a small hole in the bottom, the two heads from Mycenae, also with holes in the muzzle, were drinking cups.

A Group of Ionic Vases.—In *Jh. Oest. Arch. I.* XIII, 1911, pp. 150-166 (2 pls.; 7 figs.), W. KLEIN shows that an amphora in Würzburg with the rescue of Aeneas on the shoulder, an amphora in Berlin (No. 2154) and a hydria in the Naples museum (Heydemann, No. 2781) constitute a group by themselves, and are Ionic, not Etruscan. Incidentally he shows that the relief from Aricia in Copenhagen does not represent Orestes slaying Clytaemnestra, but Menelaus and Helen in the house of Deiphobus. It is a Roman copy of an archaic Ionic original, and in style bears some resemblance to these vases.

Epinetron and Loom.—In *Ath. Mitt.* XXXVI, 1911, pp. 145-152 (4 figs.), C. BINKENBERG shows that an *epinetron* published by Xanthoudides, *ibid.* XXXV, 1911, pp. 323 ff., as of the late Mycenaean period, is a local Rhodian product of the fifth century imitated from Athenian models. On another *epinetron*, published *ibid.* p. 324, occurs one of the rare ancient representations of an upright loom with which a Scandinavian loom in the museum at Copenhagen has been compared. The comparison is just, in spite of the objections of Kimakowicz-Winicki, *Spinn- und Webewerkzeuge*, pp. 36 ff.

Vases in the British Museum.—Eight black-figured Greek vases and two later cratera, acquired by the British Museum since 1898, are published by H. B. WALTERS in *J.H.S.* XXXI, 1911, pp. 1-20 (16 figs.). They are: I. An early Attic cylix, of style midway between "proto-Attic" and "Tyrhenian," which shows Oriental influence and has animal friezes, but differs from similar Corinthian fabrics in the deep red clay and lustrous black paint. This example has a unique ornament on the inside, a complicated rosette formed of lotus and palmettes. II. Cotyle from Boeotia, of rare form. On both sides, Heracles, seated and resting after his labors, is served with wine by Athena. A satyr and goat in each scene have suggested a connection with the satyr drama. III. Lecythus with murder of Priam. Neoptolemus plunges his spear into the body of the king, who is seated on an altar, in the presence of two Trojan women and two Greek warriors.

Astyanax is not present. IV. Lecythus from Laconia, of peculiar pyxis-shaped body, painted with a sacrifice to Athena. The goddess is seated before a blazing altar to which three worshippers bring offerings and lead up a bull. Columns indicate a temple. Not earlier than 500 B.C. V. Lecythus from Sicily, buff slip, with unique scene of the capture of Silenus. The satyr is reclining in a well-house and drinking from the spout, while an armed guard on the roof of the house is ready to seize and bind him, and two seated figures under the shade of palm trees look on at right and left. All other pictures of the story represent later stages, after the capture. The spring mixed with wine, which was originally in Macedonia but later set in Phrygia, was named Inna, and the motive of the capture, says Aristotle, was Midas's wish to be instructed by the satyr. VI. Lecythus from Thebes; capture of Thetis by Peleus, with a fish-and-lion monster, representing two of the transformations of Thetis, perched on Peleus's back. Not earlier than 500 B.C. VII. Pyxis from Boeotia, on which, if the present state is not misleading, three techniques occur: black on red, white on red, and black on white. The top has three riders with legs doubled up and heads joined in a kind of *triskeles* scheme. Similar horsemen with other figures form a frieze around the deep side of the cover, which fits down over the plain box. VIII. Lecythus of the end of the black-figured period, with device painted in dull colors on black ground. A seated woman is holding a frame on which threads are stretched, while her wool basket stands before her. Only one other instance is known of the hand loom in vase paintings. IX. Boeotian calix crater, with flying Victory on one side and Athena in a quadriga on the other. Dull colors of clay and paint and poor drawing. This and the following number are contemporary local imitations of late Attic ware. X. Campanian bell crater with scene from a torch race in which the competitor is mounted on a white horse and attended by two youths also bearing torches. The mounted torch bearers on Tarentine coins show that such contests, though originating in Attica in the fifth century, were not unknown in Magna Graecia. (For an earlier report, see *J.H.S.* XVIII, 1898, pp. 281-301.)

The Aristonous Vase.—In *Mél. Arch. Hist.* XXXI, 1911, pp. 33-74 (2 pls.; 3 figs.), P. DUCATI discusses the crater signed by Aristonous. He discusses the form of the name, and decides for 'Αριστόνοος, in preference to 'Αριστόνοθος or 'Αριστόνοφος. He then compares the decoration with that of other vases, and finds that the influence of the early Attic style is very marked, but that the vase is not Attic. Finally he concludes that it was made in Italy, probably at Cumae, in the seventh century B.C.

Cothons and Similar Types.—In *J.H.S.* XXXI, 1911, pp. 72-99 (20 figs.), R. M. BURROWS and P. N. URE discuss the vases with turned-in rim, like a safety inkstand, which have wrongly been called cothons. The large number of such vases now available through the finds at Rhitsóna in Boeotia make possible a new classification and enumeration and tend to discredit E. Pernice's explanation of them all as censers (*Jb. Arch. I.* 1899, pp. 60-72). Rather, the larger number seem to have been lamps for one or more floating or otherwise upright wicks, being a sort of link in the Corinthian period between the large Minoan lamps and the Attic bridge-nozzled lamps; while some of the covered ones may have been perfume vessels and those of metal censers.

The Haeberlin Collection.—Fifteen Greek and Italian vases and a terra-cotta relief from the Haeberlin collection at Eschersheim near Frankfurt are described by R. PAGENSTECHER in *Arch. Anz.* 1910, cols. 456-469 (10 figs.). The pictures include an offering to Hermes in black and purple on white; two beautiful scenes of victorious contestants, one a singer, on a red-figured mixing-jar; a red-figured scene of sacrifice to Apollo, where the pieces of flesh are being brought to be burnt before a small archaic figure of the god standing on a high pillar; a woman carrying offerings to a tomb, on a white lecythus; Heracles about to shoot the Stymphalian birds and acclaimed by Nike, and an attempted murder in which a woman begs her life of the intending slayer, both on an Etruscan scyphus. An Apulian stamnum of late red-figured technique is topped by a small Gnathia vase as cover-knob. The relief of a seated mourning woman seems to be a model for a relief in metal, perhaps a mirror or jar-cover or an emblem for the middle of a basin. Most of the pieces are from the Hamburger collection.

Clazomenian Sarcophagi.—In *B.C.H.* XXXIV, 1910, pp. 469-477 (2 pls.; 2 figs.), C. DUGAS publishes three sarcophagi of children with simple and carelessly executed designs (one in the Louvre; two in Constantinople) and four fragments of larger sarcophagi in Smyrna. The top of a sarcophagus (No. 4), decorated with a palmette-lotus design between two sphinxes, belongs to group IV in the classification of Prinz, 'Funde aus Naukratis' (*Klio*, Beiheft VII, pp. 33-42).

Athenian Painting.—Starting with the Dionysiac scenes on a well-known Attic vase at Naples, A. VON SALIS discusses in *Jb. Arch.* I. XXV,



FIGURE 3.—PAINTING ON A VASE IN NAPLES.

1910, pp. 126-147 (pl.; 8 figs.), the traditions of monumental painting at Athens in the latter part of the fifth century B.C., especially the pictures in the new temple of Dionysus Eleuthereus, of which Pausanias gives a scanty list, as they come down to us through vase paintings, reliefs, and Pompeian frescoes. He finds the truest representation of the ancient work in such a picture as the Death of Pentheus in the *Cass dei Vettii*, but the spirit and abandon of the composition better shown in the painting on the Naples vase (Fig. 3). Toward the end of the century there seems to have been a

revival of interest in the more savage aspects of the Dionysiac myth, of which the *Bacchae* of Euripides was a part, and also a new intensity of emotional expression in painting, to which the legend that Parrhasius used to sing at his work bears witness.

The Marsyas Religatus of Zeuxis.—In *Rend. Acc. Lincei*, XIX, 1910, pp. 887-932, A. CAPUTI supplements Böttiger's and Michaelis's studies of the Marsyas myth, distinguishing lyric, dithyrambic, and tragic forms of the story, as influenced by Attic jealousy of Boeotia. The Hyginus form of the myth, differing in some particulars from that in Apollodorus, is derived, he thinks, from a satyr-drama, almost certainly by Euripides, and this drama gave Zeuxis a subject for a famous painting, which Philostratus (*Imag.* 2) describes and of which Pliny (*N.H.* XXXV, 10, 66) speaks as a *Marsyas religatus*. An analysis of this hypothetical play is given (Caputi thinks Euripides first made the Muses judges of the contest and added the character of Olympus), and the extant monuments, plastic, ceramic, and painted, are classified and discussed as casting light on play and painting. The Marsyas group of the Forum was an attempt to reproduce this painting in marble. The article ends with an attempt to group the figures in this supposed painting of Zeuxis.

The Work of Apelles.—The gold portrait medallion of Alexander from Aboukir, which was interpreted by H. Thiersch as copied from the Alexander with a Spear of Lysippus (*Jb. Arch.* I, 1908, pp. 163; *A.J.A.* 1909, p. 494), is again discussed, by J. SIX, in *Jb. Arch.* I, XXV, 1910, pp. 147-159 (fig.). He thinks it taken from an otherwise unknown portrait bust by Apelles, the official portrait painter of the king; his arguments being that the large eye, the full-face view, and the placing of the attributes of shield and spear close beneath the chin are all characteristics of painted portraits, but inconsistent with the supposition of copying from a statue by Lysippus. The general scheme, in which the shield is especially prominent, was used through a long line of imperial portrait medallions down to the late Byzantine emperors, and some member of this series, perhaps about the time of Gallienus, must have been the model for Rembrandt's Glasgow and St. Petersburg Minervas, in which the motive again appears in the original medium. Incidentally, the relation of Dutch and Flemish painting to the antique is discussed, and a plea is made for freedom in provisionally assigning known works to known artists of antiquity.

INSCRIPTIONS

An Interpretation of the Phaestus Disk.—In *Burl. Mag.* XVIII, 1911, pp. 23-38, appears a new reading of the Phaestus disk by Miss F. M. STÄWELL (see *A.J.A.* XV, p. 234). The reading was worked out without reference to the Cypriote syllabary, but shows many points of correspondence with it. The signary is partly syllabic and partly alphabetic. Miss Stawell reads the inscription from the circumference of the disk inwards, and believes that the disk itself is a matrix for the casting of liturgical cymbals. The inscription, according to her reading, forms itself into a hymn to Athena, in dochmiaeac metre with strophe and antistrophe. The cymbals were thus inscribed with the words of the hymn, by way of guiding the worshipper while he used them in his devotions, thus constituting a kind of "portable psalm-book."

Inscriptions in the Cypriote Syllabary, but not in Greek.—In *Sitzb. Berl. Akad.*, 1911, pp. 166-169 (pl.), R. MEISTER publishes two inscriptions which have come to light in the Ashmolean Museum at Oxford. Of their origin nothing is recorded, but they are evidently Cypriote. The language in which they are written is, however, not Greek, nor is it Phoenician. The characters are those of the Cypriote syllabary.

Cypriote Inscriptions.—In *Sitzb. Sächs. Ges. LXII*, 1910 (No. 8), pp. 233-247 (3 pls.), RICHARD MEISTER ('Beiträge zur griechischen Epigraphik und Dialektologie IX') publishes and discusses eight Cypriote inscriptions. The first is the inscription from Athienu, now in the Metropolitan Museum in New York, the front of which was first published by Cesnola, *Cyprus*, Pl. V (Taf. CI of the German translation). The back is inscribed with a list of prices. The second inscription is transliterated Τυμόγαμός ἡμι ὁ Τυμόδαμων. It is from Marion-Arsinoe. The remaining inscriptions are brief epitaphs and dedications from Rantidi.

Attic Treasure Records.—Three more of the fragments lying in the Epigraphical Museum at Athens are discussed by A. M. WOODWARD in *J.H.S.* XXXI, 1911, pp. 31-41. They are a piece of the pronaos treasure record for the year 431-430 B.C. (*C.I.G.* I, 120), which shows the exact number of phialae in the chamber during the years 434-430; and two pieces of the Hecatomedon record for the years 432-431 and 431-430 (*I.G.* I, 143, 144), one of which shows that *I.G.* I, 147, with the beginning of the record of a new penteteris, 430-426, was on the same face of the same stone as the above.

Double datings in Attic Decrees.—In *Sitzb. Berl. Akad.* 1910, pp. 982-988, U. v. WILAMOWITZ-MOELLENDORFF discusses the double datings (*κατὰ ἀρχοντα* and *κατὰ θεού*) in Attic decrees of years in which there were intercalated months (*I.G.* II, 5, 733; II, Add. 238b; II, Add. 320b; II, 381; II, 433; II, 5, 451b 9; II, 408; II, 437; II, 471, 1; II, 471, 50; also II, 408, and II, 437). He offers an arrangement of days for the twelve months, and finds that in the years in which double datings were used, the date *κατὰ θεού* had the preference.

A Decree in Honor of a Merchant.—In *Ath. Mitt.* XXXVI, 1911, pp. 73-86, A. v. PREMERSTEIN publishes a fragmentary Athenian decree honoring a metic who, on two occasions about the year 175 B.C., had helped to increase the finances of the state by selling it first a quantity of grain, and later a large amount of oil at an especially low price. These commodities the state apparently disposed of at a profit.

Inscriptions from Delphi.—In *B.C.H.* XXXV, 1911, pp. 149-176 (pl.), E. BOURGUET discusses (1) the inscriptions on one of the two bases which supported dedications of the Liparaeans. To the two slabs already known five new slabs are to be added. The base bore, in addition to the archaic inscription on its top surface, [Διπαραῖο]· τὸ[πό]λ[λον] δ[εκάταν δ]πὸ Τυπον[δρ]ι, a second inscription on the front face in letters 0.17 m. high, finely carved in the style of the fourth century. This is to be restored [Διπα]ρ[αῖο] δ[πό]λ[λον] T[v]ρο[πανον]. The spacing of the letters shows that the base was at least 20 m. long, though not necessarily in one straight line. It is tentatively brought into connection with a foundation 18 m. long, and of adequate width, lying west of the stoa of the Athenians. It is argued further that the Theban treasury is to be located in the southwest corner

of the precinct. (2) A newly discovered fragment of the inscription on the pedestal of a statue dedicated by the Spartan king Pausanias, in honor of his son Agesipolis, confirms the restoration of the couplet by Wilhelm and Pointow, and gives the name of the sculptor, [ΚΛ]εων. (3) An inscription, hitherto unpublished, is on the base of a statue probably of Theodotus, a general of Philopator. (4) Thirteen decrees for the Aetolians carved on one base (Homolle, *B.C.H.* XXI, 1897, pp. 407-412), and ranging in date from the fourth century to 145 B.C., were all inscribed at the latter date. (5) A new fragment of the Greek inscription on the base of M. Minucius Rufus is published, and the whole inscription restored. It is uncertain whether this belongs with the two Latin inscriptions, or whether there were two statues.

Inscriptions from Syros. — In *Ath. Mitt.* XXXVI, 1911, pp. 157-162, (fig.), T. SAUCIU publishes an inscription from Syros, now in Athens, commemorating a certain Attalus and his wife, as holders of the priestly office of ἄρχων στεφανηφόρος and ἄρχεινη at Syros during the reign of Antoninus Pius. It is one of a class of inscriptions from that island published by Klon Stephanos, *Αθήναιον*, III, 1874, pp. 526 ff., and in *Ἐπιγραφαὶ τῆς νήσου Σύρου*, Athens, 1875, pp. 14 ff., = *I.G.* XII, 5, 659-668.

Laodice Philadelphus of Pontus. — An inscription in honor of Laodice (Λαοδίκην τὴν βασιλέως Φαράκου καὶ Μιθραδάτου ἀδελφήν), found at Delos, is published by T. REINACH in *B.C.H.* XXXIV, 1910, pp. 429-431. She is to be identified with the queen of Pontus, Laodice Philadelphus, sister and wife of Mithradates IV, and is represented with the latter on a silver tetradrachm published in *R. Num.* 1902, pp. 52-65.

An Inscription from Thermon. — In *Klio*, X, 1910, pp. 397-405, H. SWOBODA shows that the important inscription found by Soteriades at Thermon (see *Ἐφ. Ἀρχ.* 1905, pp. 56 ff.), which records an alliance between the Acarnanians and the Aetolians, is to be dated between 272 and 265 B.C., i.e. between the death of Pyrrhus and the outbreak of the Chremonidean war.

Inscriptions from Thessaly and Macedonia. — Eleven inscriptions from Thessaly and Macedonia are published by J. HATZFELD in *B.C.H.* XXXV, 1911, pp. 231-240. No. 1, found at the base of the walls of Atrax, is a manumission inscription which modifies the list of Thessalian *strategoi* established by Kroog, *de foederis Thessalorum praetoribus*, and Kern, *I.G.* IX, 2, pp. xxiv-xxv. No. 8 is an epitaph in four hexameters, to be dated not later than 500 B.C.

An Honorary Inscription. — In *Jh. Oest. Arch.* I. XIII, 1911, pp. 200-209 (fig.), A. v. PREMERSTEIN discusses a Greek inscription from Alabanda in Caria, now in Braunsberg, East Prussia. It is an honorary inscription dating from the time of Trajan, and records the various offices held by a certain L. Aburnius.

Curses on Lead Tablets. — In *Arch. Rel.* XIV, 1911, pp. 143-158 (fig.), A. ABT publishes five inscribed lead tablets in Munich. Two of these are unintelligible; the others are curses or *defixiones*. One is inscribed with curses on both sides.

COINS

Interpretation of Greek Coin-Types. — The types of Greek coins that show heroes embarking in or disembarking from ships, or otherwise stand-

ing in some relation to ships, are analyzed and elucidated by F. IMHOOF-BLUMER (*Nomisma*, V, 1910, pp. 25-42; 2 pls.). Some earlier attributions of names are rejected (especially Aeneas), and fifteen new ones assigned. A second part of the same essay deals with the types of athletes and agonothetae with prize-wreaths.

Re-attribution of Certain Tetradrachms of Alexander the Great.—In *A. J. Num.* XLV, 1911, pp. 1-10 (7 pls.), EDWARD T. NEWELL begins the publication of a series of articles in which he traverses various conclusions of L. MÜLLER in his *Numismatique d'Alexandre le Grand* (Copenhagen, 1855), and proposes a new classification of the coins concerned.

Greek Gold Coinage.—In *Ber. Kunsts.* XXXII, 1911, cols. 150-154 (6 figs.), K. REGLING discusses briefly Greek gold coinage.

GENERAL AND MISCELLANEOUS

Mycenaean Rings.—In *Kunstchr.* XXII, April 28, 1911, col. 383, E. WALDMANN reports that at a meeting of the Imperial German Archaeological Institute at Athens, March 8, 1911, V. Staes showed that some of the gold rings from the shaft graves at Mycenae are not the product of pure mainland art, but were inspired by Cretan carvings in ivory. Such, for example, is the case with the famous ring representing women engaged in religious rites in the presence of a double axe and a deity. The ivory reliefs found at Mycenae were Cretan imports, and were copied by the Mycenaean gem engravers.

The Ivory and Bone Carvings from Sparta.—At a meeting of the British School at Athens, January 27, 1911, R. M. Dawkins traced the artistic development in the long series of ivory and bone carvings (ranging from the eighth to the sixth century B.C.) found on the site of the sanctuary of Artemis Orthia at Sparta. In the earliest of the ivories the drawing is stiff, and there is little or no modelling. Those of the next period (about 700 B.C.) are marked by deeper relief and elaborate incised surface-decoration, which compensates for the lack of modelling. The culmination (seventh century) is marked by freer drawing and more developed modelling. After about 600, ivory is exchanged for bone, and there is a tendency to cut away the background, leaving the figures free, though the relief technique survives in many cases. This development holds good for all the classes of carvings (fibula-plaques, combs, seals, etc.), showing that, by whatever foreign influences the art may have been affected, the objects are, with some few exceptions, indigenous. (*Athen.* February 11, 1911, p. 169.)

Delphinus.—In *Klio*, XI, 1911, pp. 1-25, W. ALY calls attention to the precinct of Delphinus at Miletus. It was 50 by 61 m. in extent, with a circular foundation, which may have supported a wooden structure, near the centre. It also had a great altar and smaller altars dedicated to Zeus Soter, Artemis and Hecate, but no cult temple. The precinct lay outside the early town, but near the centre of the later city. The writer argues that Delphinus was a Cretan deity, and that his sanctuary at Miletus was founded by Cretans. His name may be a translation, but is perhaps connected with Tilphosa. He was worshipped in the open air like other gods in prehistoric Greece. The idea of a temple was not Greek, but came from abroad, perhaps from Egypt. An unfortified Cretan settlement was made at Athens

in very early times, and another at Miletus about 1400 B.C. Side by side with these were other settlements made by Greeks, the one at Athens dating from Mycenaean times, and that at Miletus not later than 800 B.C. The two races became united. Athena, as well as Delphinius, came from Crete.

Notes on Cybēbē.—In *R. Ét. Anc.* XIII, 1911, pp. 75-78, G. RADET argues further in support of his theory that Cybēbē, Artemis Anaitis, and the goddess known in the time of the Antonines as Core are the same.

Τριτοπάτερες.—The minor Attic divinities called *Τριτοπάτερες*, which were hardly understood in later antiquity and have not been satisfactorily interpreted by modern scholars, are discussed by G. LIPPOLD in *Ath. Mitt.* XXXVI, 1911, pp. 105-109. The clearest statement about them is in Harpocration a.v. *Τριτοπάτορες*: μόνοι Ἀθηναῖοι θύοντι τε καὶ εὐχονται αὐτοῖς ὑπὲρ γενέσεως παιδῶν, ὅταν γαμεῖν μελλωσιν. The Athenians prayed to them for παιδες γνήσιοι. A παῖς τριτογενεῖς is thus a παῖς γνήσιος, as Athena *Τριτογένεια* is the "genuine" daughter of Zeus. The *Τριτοπάτερες* are then the "genuine" ancestors.

The Cordax in the Cult of Dionysus.—In *R. Arch.* XVII, 1911, pp. 1-5 (fig.), MARCELLE AZRA HINCKS publishes the drawing on a Corinthian aryballus found at Cumae (British Museum, A 1437), on which figures dancing the cordax are represented. The dance antedates the introduction of the cult of Dionysus at Corinth, and was perhaps originally associated with the cult of Artemis. One of the figures on this vase wears a panther skin. This is the earliest representation of the cordax in connection with the cult of Dionysus.

The Antiquities of Andros.—At a meeting of the Austrian Archaeological Institute in Athens, January 18, 1911, T. Sauciu gave a brief summary of the history of Andros, together with a description of the present appearance of the island and remains there. The old harbor of Andros, the modern Gausion, is still in use, and parts of the ancient moles are to be seen under water. The site of the ancient city is occupied by the modern Palaeopolis, some four hours distant from the harbor. Upon the side of the acropolis, which is turned toward Kuvara, very slight traces of the ancient fortifications are still evident, among them remains of the foundations of the walls, and of one of the bastions, some 8 m. in diameter, called "Pyrgos" by the natives. Lower down are ruins of an ancient gateway, near which is a considerable stretch of well-preserved terrace-wall of marble blocks. This, then, is probably the site of the chief part of the city, a view supported by the fact that a number of inscriptions have been discovered in this vicinity. Several of these are yet unpublished. One is a decree, to be dated shortly before 388 B.C., bestowing honors upon a certain Antidotus, son of Antiphanes, because he had furnished grain cheaply to Andros (see *Ath. Mitt.* XXXVI, 1911, pp. 1-20). To the same period belongs a proxeny decree, as yet unpublished. A later inscription, from the time of the Pergamene dominion, shows that although autonomous and free in practically all respects, Andros must still pay a tax and furnish a military contingent. This inscription, belonging to the beginning of the second century B.C., mentions a man, whose name is lost, who first became *phylax* (probably of the prytany), and then led a body of troops to Asia Minor in accordance with instructions from Attalus I. It mentions incidents of the third Syrian war, in which the city of Thymbria in the Troad took the Pergamenian side

and opposed the Syrian king Antiochus, when he led his army to the Troad to lay waste the territory of the Attalids and their allies. Another inscription, an honorary decree for a gymnasiarich, shows Andros at that time still loyal to the Attalids. The last inscription, from Roman times, tells us that the *evocatus Augustorum*, M. Aurelius Rufinus, with three others of the praetorians, had a *speleum* erected to the *deus sanctus invictus*, for the welfare of L. Sept. Severus and his two sons. This *deus sanctus invictus* is the Persian sun-god Mithra, whose worship was in such vogue with the Roman soldiery at that time. The inscription is probably to be connected with the Parthian expedition of the emperor. It is noteworthy that here, too, the name of Geta was later erased. There are also two unpublished statues: one, an Artemis of the Hellenistic period and of the Amazon type, bears a marked resemblance to an Artemis now in the Palazzo Rospigliosi at Rome; the other is an archaic "Apollo" of the same type as the well-known Ptoean "Apollo." In addition to these, there were found two beautiful sarcophagus reliefs of the Eros-Thanatos type.

The Excavations in the Ceramicus.—In *Πρακτικά* for 1909, published 1911, pp. 105-112, A. BRUECKNER discusses briefly his excavations in the Ceramicus (see *A.J.A.* XV, pp. 87 f.), explaining the change in levels.

The Heracleum in Melite.—In *Ath. Mitt.* XXXVI, 1911, pp. 113-144 (2 pls.; 4 figs.), A. FRICKENHAUS disputes Dörpfeld's identification of the sanctuary excavated by him west of the Athenian Acropolis as the *Διονύσους ἐν Λίμναις*, on the ground that a sanctuary which was opened only in February would not contain a wine-press. The square foundation which supported four small columns shows that the precinct was a Heroon, and the existence of a number of reliefs (one in Boston, cf. *A.J.A.* VII, 1903, p. 85) and vase paintings in which Heracles is shown standing beside or seated in a similar structure, points to the conclusion that it was dedicated to that divinity. It can thus be no other than the sanctuary of Heracles in Melite, the only known Heracleum within the city walls of Athens.

Notes on the Persian Wars.—In *J.H.S.* XXXI, 1911, pp. 101-109, M. O. B. CASPARI offers some suggestions on a few still disputed points in the history of the Persian wars. He gives strong reasons for rejecting Lolling's identification of Marathon as the ancient Marathon, and preferring Leake's earlier selection of Vrana, with the Heracleum on the site of the modern Hagios Georgios, where the annual festival is still attended by visitors from all Attica. The recorded weakening of the Athenian centre may be explained by the nature of the ground in front of Vrana, and the great haste of the Athenians in forcing the battle and marching home without any rest after it, by the fact that the Persian fleet had already sailed for Athens before the battle. Other points touched upon are the dependence of Xerxes's army at Thermopylae upon the fleet for provisions; the position of Psyttaleia and the reasons for stationing the Persian nobles there before the battle of Salamis to direct the movements of the fleet in the night; and the reasons for the advance of the Greeks at Plataea along the Asopus ridge, where the elevation gave momentum to their attack.

Sellasia.—In *B.C.H.* XXXIV, 1910, pp. 5-57, G. SOTERIADES discusses the topography of the battlefield of Sellasia, combating the views of Kromayer, *Antike Schlachtfelder*, and maintaining that the description of Polybius cannot be accepted as accurate. J. KROMAYER, *ibid.* pp. 508-537 (pl.),

defends his views. SOTERIADES, replying, *ibid.* XXXV, 1911, pp. 87-107, strengthens his arguments, and in an addendum, pp. 241, 242, describes the results of more recent observations and excavations made on the site. The questions in dispute are (1) the course of the ancient road, (2) the hill Enas, (3) the stream Gorgylus, (4) the hill Olympus. Kromayer supposes that the ancient road ran between the two hills Palaiogoula (Enas) and Melissi (Olympus). Soteriades believes that it followed the same course as the bridle path west of Palaiogoula, which has now been superseded by the high road from Tripolis to Sparta, and his excavations have revealed abundant traces of an ancient road there. If this be accepted, the identification of the two hills as Enas and Olympus must be given up. Soteriades argues further that the north slope of Palaiogoula is too steep to admit of the operations described as taking place on Enas, and that there are remains on the top of the hill of quite an extensive Greek fort which would have been a factor in the battle. These remains Kromayer held to be Turkish. According to Soteriades, the gully which Kromayer identifies with the Γόργυλος ποταμός is not a stream, and Melissi (Olympus) is not a λόφος, but simply a spur of the mountain Probatares.

Nerikos.—In *Ath. Mitt.* XXXVI, 1911, pp. 207-211, E. HERKENRATH maintains that the Nerikos both of Homeric and classical times was situated on the present island of Leucas, and that in Homer the name is applied to the island as well, which was then the ἀκτή ἡπέρου. The promontory which Dörpfeld holds to be Nerikos cannot be properly termed an ἀκτή. The town is identified with that excavated by Dörpfeld in the plain of Nidri. W. DÖRPFELD, criticizing this theory (*ibid.* pp. 212-219), argues that Leucas is now generally conceded to have been an island in Homeric times, and that, therefore, Nerikos must be sought elsewhere. The Acarnanian promontory, on which he has excavated a small fortress, is a true ἀκτή, and suits the evidence in Homer and in classical writers.

Greece and the West.—At an open meeting of the German Archaeological Institute in Athens, February 1, 1911, G. Karo discussed the relations of Greece with the West. The prevalent view is that the East, especially the region around the Euxine, as well as the West, Iberia, Massilia, Sicily, Southern Italy, etc., were discovered by the Greeks in the eighth and seventh centuries B.C.; but we have evidence of relations at least a thousand years earlier in such legends as those of Jason, Odysseus, the Pillars of Heracles, the sea-power of Minos, and especially the legend which associated the death and burial of the latter with Sicily. Excavations, within the last ten years, have shown clearly that even if these legends are not to be taken literally, still there is a reason for their existence, and they probably echo actual commercial relations with these places. The so-called Minoan civilization, which had developed a very high culture in the third millennium B.C., maintained constant intercourse with Egypt, the Bosphorus, and the shores of the Eastern Mediterranean. We find a great many obsidian articles belonging to this period. Melos was a great centre for this material, but it is noteworthy that quantities of it are found in Sicily also. Furthermore, excavations in Sicily and Southern Italy have revealed a culture which is very similar to the Cretan, and many objects found there seem to belong to Cretan workmanship of this period. In the second millennium B.C., Crete developed still wider and stronger commercial relations with other lands.

Close and constant intercourse was maintained with Egypt and the Eastern Mediterranean, and with the West as well. The famous "Minoan" fleet was not merely a collection of warships, but a great commercial fleet as well. We find, at this period, articles of exactly the same type in both Lipara and Egypt, and Crete was doubtless the medium which effected the exchange. Bronze at this time was in common use. The copper for this was readily obtainable near at hand, but tin was not so easily procured, and the most reasonable supposition is that it was obtained from Spain. This is borne out by discoveries in Spain. The early, native, Iberian culture shows marked Mycenaean influence, traces of which existed even in Roman times. Graves of the same type have been found there, and many articles which show marks of the same culture. Most striking of all is the famous man-headed bull from Balazote, which clearly shows Chaldaean influence, and we must think of Crete as the medium between the two countries.

The Macedonian Dialect.—In *B.C.H.* XXXV, 1911, pp. 120-131, P. PERDRIZET traces the survival of the Macedonian dialect in Egypt under the Ptolemies, and discusses the varying forms of the inscription on the coins of Geta, king of the Edoni.

Geta, King of the Edoni.—As was often the case in antiquity as well as at the present time in the Balkan states, Geta, king of the Edoni, was not of the same race as his subjects, but came of the famous Danubian people, the Getae. The foreign dynasty may have been called in for religious reasons, since the Getae were renowned for piety, or a tribe of the Getae may have conquered the Edoni. The statement that among the Getae only slaves were tattooed, whereas in Thrace the custom was limited to the free-born, suggests that the Getae were a conquering race which had given up the practice, while the Thracian tribe, reduced to a state of serfdom, still continued it. A difference of race between the Edoni and their dynasty is suggested also by the statement of Herodotus that in Thrace Hermes was worshipped by the kings alone. Hermes conducting cattle appears on the coins of Geta, on a coin of the Derroni, and on some coins of the Orrescii. The limitation of the cult to the kings may have existed among certain tribes in the Pangaean district, and have been attributed erroneously by Herodotus to the whole of Thrace. (P. PERDRIZET, *B.C.H.* XXXV, 1911, pp. 108-119.)

Itonos and the "Inventio Scuti."—In *R. Hist. Rel.* LX, 1909, pp. 161-190 (3 figs.); 309-351 (11 figs.); LXI, 1910, pp. 197-237 (20 figs.), A. J. REINACH discusses the prehistoric Greek shield and its use in certain religious ceremonies. The small round shield of early times was made of willow, *īrā*, and its inventor was called Itonos. As a god of the shield he was carried from Thessaly to Crete, where he came to be regarded as one of the Curetes. In classical Greek times this type of shield was not used except in the mysteries of the Curetes.

The Origin of the Great Games of Greece.—In a recent lecture at Cambridge Professor W. Ridgeway tried to show that the great games of Greece did not originate in the cults of Zeus, Apollo, and Poseidon, but arose out of games held in honor of local heroes upon whose cults the worship of the great divinities was later imposed. Thus the Nemean games were originally held in honor of Opheltes, the Isthmian in honor of Palaeamon, the Olympic games probably in honor of Pelops, and the Pythian games

to celebrate some local hero, now forgotten, whom Apollo replaced. (*Athen.* March 4, 1911, p. 249.)

Babylonian Influence in the *Odyssey*. — In *Mitt. Vorderas. Ges.* XV, 1910, pp. 136-475, C. FRIES attempts to show that the Phaeacian episode in the *Odyssey*, including the *άτρολογος*, is to be regarded as a unity. The episode does not rest upon free invention, but upon an actual transaction; and this is not a single occurrence, but the repeated act of a religious cult that was widespread in the ancient Orient. It is derived from the *Zagmuk* festival of the Babylonians, which celebrated the rebirth of nature in the spring of the year.

Archaic Greek Costume. — A detailed study of the Doric and Ionic types of archaic Greek costume by G. PINZA appears in *B. Com. Rom.* XXXVIII, 1910, pp. 183-242 (pl.; 18 figs.). It is based upon an Attic amphora and an archaic statue, both in the Capitoline Museum.

The Hair in Early Greek Times. — In his doctor's dissertation, *Die Haartracht des Mannes in archaisch-griechischer Zeit* (Giessen, 1911, R. Lange, 73 pp.), WALTER BREMER explains the various methods of wearing the hair in early Greek times, as shown by the monuments, and discusses the evidence for the *krobylos*. *Tettiges*, he thinks, was the name for a garland of leaves.

Ξαίνειν. — In *Jh. Oest. Arch. I.* XIII, 1911, Beiblatt, cols. 269-276, F. HAUSER disputes H. Blümner's dictum that *ξαίνειν* does not mean to rub, but to card. *Ibid.* cols. 275-278, H. BLÜMNER replies in support of his interpretation.

Illustrations of Spinning. — In *Jh. Oest. Arch. I.* XIII, 1911, Beiblatt, cols. 245-252 (5 figs.), MARGARETE LÁNG publishes two vases and three terra-cottas illustrating spinning.

The Masks of the New Attic Comedy. — The masks of the New Comedy have been carefully investigated and discussed by Professor Robert. He begins with the catalogue given by Pollux (IV, 143 ff.; pp. 244 ff. Bethe), discusses other literary sources of information, illustrates and discusses the different types of masks as seen in terra-cottas, reliefs, paintings, and drawings (notably the illustrations to Terence), and shows that some types, e.g. the Hermonios of Pollux, were conventional and were handed down from the Old Comedy, while others, including most of the female masks, were realistic and modern. Many matters of detail are discussed and elucidated. (CARL ROBERT, *Die Masken der neueren Attischen Komödie*. Fünfundzwanzigstes hallisches Winckelmannsprogramm. Gedruckt aus den Mitteln der Robert-Gabe. Halle a.S., 1911, Max Niemeyer. 112 pp.; pl.; 128 figs. 4to.)

Greek Papyri. — In the second volume of *Tabulae in usum scholarum editae sub cura Johannis Lietzmann*, WILHELM SCHUBERT has collected nearly eighty papyrus texts on fifty plates. The papyri are in the Berlin museum; those selected show the development of handwriting from the end of the fourth century B.C. to the beginning of the eighth century A.D. Documents, letters, and literary writings are represented. The brief text gives the necessary facts concerning each papyrus. (WILHELM SCHUBERT, *Papyri Graecae Carolinenses*. Bonn, 1911, A. Marcus and E. Weber; Oxford, Parker and Son. 50 pls.; 2, xxiv pp., large 8vo; in linen, 6 M., in parchment, 12 M.)

Genoese in Greek Lands. — A brief account of the career of the Genoese family of the Zaccaria in the Aegean during the thirteenth and fourteenth centuries, especially as lords of Phocaea with its rich alum mines and of Chios with its mastic gardens, and their defiance of imperial authority and steady resistance to Turkish conquest of the islands, is given by W. MILLER in *J.H.S.* XXXI, 1911, pp. 42-52. A chronology of Genoese colonies and lords in Greek lands, 1275-1464, is appended, pp. 53-55.

Archaeological Activity in Greece in 1909-10. — In *R. Arch.* XVI, 1910, pp. 427-430, S. R. gives a brief summary of the archaeological work done in Greece in 1909-10. This is derived chiefly from an article by STRUCK in the *Frankfurter Zeitung*, October 26, 1910.

ITALY

ARCHITECTURE

The Architecture of the Columbarium of Hylas. — In *B.S.R.* V, 1910, pp. 464-471, T. ASHBY writes the descriptive text to accompany a series of drawings and colored plates made by F. G. Newton, a student of the British School at Rome, illustrating the architecture and decoration of the Columbarium of Hylas on the Via Latina, just inside the Porta Latina.

SCULPTURE

Portraits of Gaius Caesar. — At the January (1910) meeting of the Berlin Archaeological Society F. Studniczka discussed two types of head which have both been called portraits of the emperor Caligula, and decided that one of them, a boyish type, represented in the Capitoline, Albani, Uffizi, and Naples museums, is in reality the portrait of the other C. Caesar, the son of Julia and of Agrippa, to whose portraits the features bear a strong resemblance. (*Arch. Anz.* 1910, cols. 532-533.)

The Interpretation of the Reliefs of Trajan's Column. — In *B.S.R.* V, 1910, pp. 435-459, H. STUART-JONES writes on the historical interpretation of the reliefs of Trajan's column, and arrives at some conclusions in regard to the details of Trajan's campaigns in Dacia which differ somewhat from those of von Domaszewski and Weber, and to a less degree from those of Cichorius and Petersen.

A Relief of Serapis and Isis. — A singular relief in the Palazzo Massimo alle Terme, representing Serapis and Isis, is explained by F. GROSSI GONDI (*B. Com. Rom.* XXXVIII, 1910, pp. 150-160; 3 figs.) as an example of mythological syncretism. It dates from about 200 A.D.

Landscape Motives in Greek and Roman Reliefs. — In *B.S.R.* V, 1910, pp. 167-200, A. J. B. WACE discusses the development of the landscape motives in Greek and Roman reliefs in general, and in particular analyzes the series of eight reliefs now in the Palazzo Spada and some others akin to them, adducing further evidence for their purely Roman origin, and assigning definite dates. Six of the Spada reliefs he assigns to 130 A.D., and the remaining two to 160.

Roman Reliefs in the Louvre. — In *Mon. Piot*, XVII, 1909, pp. 145-253 (pl.; 15 figs.), E. MICHON discusses a number of Roman reliefs in the Louvre. These are: (1) a Suovetaurilia which formed part of the frieze of

the altar dedicated to Neptune by Cn. Domitius Ahenobarbus; (2) a slab with a procession from the Ara Pacis Augusti; (3) a standing Roman clad in the toga, similar to the reliefs of the Ara Pacis, but not from that monument, and dating from the time of Trajan; (4) a Suovetaurilia carried off from Venice in 1797 and dating from the period between Augustus and Nero; (5) a fragment of a similar relief of the same date acquired in 1808 depicting an ox, ram and two priests; (6) a fragment representing a combat between a Roman soldier and a barbarian, probably from a building of Trajan; (7) a slab of the best period with five headless figures originally representing an emperor accompanied by Rome and Abundantia pouring a libation; (8) a broken relief with two scenes, an *extispicium* and a ceremony in front of the temple of Jupiter Capitolinus, dating from the time of Trajan and bearing on a sandal the signature of the sculptor, M. Vulpius Orestes; (9) the sacrifice of a bull in front of two buildings, perhaps from a triumphal arch of the time of Hadrian; (10) a group of six standing Roman soldiers, also of the time of Hadrian; (11) a relief known as "the sacrifice of two bulls," dating from the beginning of the third or end of the second century A.D.; (12) the torso of a colossal statue in the round probably placed beside a triumphal arch.

A Roman Sarcophagus.—In *Hermete*, XLVI, 1911, pp. 249-253 (pl.), C. ROBERT discusses a slab from a sarcophagus in the Sala del Meleagro in the Vatican museum, on which, in the centre, is a seated female figure with her right arm about a smaller woman. She is turning towards a youth who stands on her left. In the foreground are boats and ships, and in the background buildings. He shows that the scene is laid at Ostia; that the seated woman is *Ora maritima*, the smaller woman *Ostia*, and the youth *Portus Augusti*.

The Torre Nova Sarcophagus.—The interesting Torre Nova sarcophagus of a maiden (see *A.J.A.* XV, pp. 241 f.) is again discussed in *Röm. Mitt.* XXV, 1910, pp. 273-292. The author, F. HAUSER, interprets the Eleusinian suggestions of the reliefs not as referring literally to the mysteries, but as symbolical of the girl's unmarried state.

VASES AND PAINTING

South Italian Vases.—In *B.C.H.* XXXV, 1911, pp. 177-230 (5 pls.), C. PICARD surveys the later development of south Italian pottery on the basis of the collections in Italian museums, and publishes a number of vases in the museum at Naples. The so-called Gnathia vases are classified with regard to fabric and provenience, the chief Apulian centres being Tarentum, Ruvo, Canosa, Oria, and Manduria, while similar vases have been found in Campania and Sicily (Gela and Camarina). They are to be dated between the years 350 and 250 B.C. The relation of these vases to contemporary Italian ware which imitated Greek models and to rustic Apulian ware is discussed, as well as the evidence afforded by pottery as to the political predominance of Tarentum down to its destruction in 272 B.C.

Glaze or Polish on Terra-Sigillata?—In *Die Saalburg*, December 31, 1910, pp. 403-407, K. BLÜMLEIN maintains, against E. Heuser, that Roman terra-sigillata ware was polished, not glazed.

The Tomb of the Nasonii.—The last writing of A. MICHAELIS, finished

a few days before his death, is published with additional notes by E. PETERSEN, in *Jb. Arch. I.* XXV, 1910, pp. 101-109 (24 figs.). He describes the various copies which remain of the painted decoration of the rock-cut tomb of the Nasonii, which was found on the Via Flaminia near Prima Porta in 1674. The paintings themselves, which covered the walls and ceiling and were ascribed to the time of the Antonines, disappeared within a few years of their discovery. Michaelis finds that Bartoli's sketches and engravings are quite untrustworthy, both in color and in contents, since the architectural and landscape backgrounds and important parts of the groups and attributes were freely invented by the artist. An appendix (pp. 110-126) gives a catalogue of the copies of ancient paintings in the library at Windsor Castle, among which the materials for this study were found.

Panel Pictures in Fresco Decoration. — Apropos of the frescoes from a Roman house in the Farnesina gardens, G. RODENWALDT shows, by the help of a Vienna mosaic from Centocelle, that the imitated panel pictures in fresco decoration were in fact copies of well-known paintings. (*Röm. Mitt.* XXV, 1910, pp. 257-262; 2 figs.)

Pompeian Wall Painting. — In *Jh. Oest. Arch. I.* XIII, 1911, pp. 123-149 (21 figs.), W. KLEIN shows that the Pompeian fresco painters made a study of the antique, and that in their paintings they frequently reproduced more or less exactly masterpieces of Greek sculpture. For example, the Artemis in the picture of Actaeon and Artemis in the Casa degli amorini dorati is indebted to the Aphrodite of Cnidos; the Auge surprised by Hercules resembles a bronze statuette of Aphrodite in the Louvre; the Perseus of the Perseus and Andromeda (*Not. Scav.* 1897, p. 36) resembles the Barberini faun; the Perseus of the Perseus and Andromeda in the Casa degli capitelli figurati is much like a torso from the Palatine in the Museo delle Terme; the seated figure of the group in the house of the Vettii, called by Mau a poet and his friend, resembles a seated statue formerly in the Giustiniani palace; the seated Heracles of the Casa d' Ercole is to be compared with a seated statuette in the Palazzo Altemps, while the female figure beside him is reproduced in a marble statue in Dresden. Such resemblances are numerous. A study of the Pompeian paintings will reveal free reproductions of lost Greek sculptures.

The Newly Discovered Frescoes at Pompeii. — In *Berl. Phil. W.* XXXI, 1911, cols. 503 f., O. ROSSBACH gives a new interpretation of some of the fresco paintings in the newly discovered villa at Pompeii. (*A.J.A.* XV, 1911, p. 97.) Of the series XII-XX, he thinks XIII, XIII, and XVIII, XIX, and XX are scenes in the gynaikonitis, interrupted by pantomimic scenes, XIV-XVII. Rejecting Giulio de Petra's view of XVI and XVII as a flagellation rite, Rossbach thinks the women are dancers and the object, from which one of them turns in horror, a tunny. These last scenes are again differently interpreted by J. SIEVEKING, *ibid.* XXXI, 1911, col. 599, who thinks the object is a basket, from which the kneeling woman lifts the cover, disclosing the contents to Aidos, who turns away in horror; another Dionysiac scene, therefore.

INSCRIPTIONS

A New Fragment of the Fasti Augurales. — In *Jh. Oest. Arch. I.* XIII, 1911, Beiblatt, cols. 253-256 (fig.), C. HUELSEN publishes a new fragment

of the Fasti Augurales recently found in a dealer's shop in Rome and now in the Museo delle Terme. It reads, with Huelsen's restorations:—

*Sp. Postu]mius A. f. P. nepos Albus [Regillensis cooptatus
L. L]ucretio T. f. Tricipitino, T. V[et]erio Geminus cos.
post R(omam) c(onditam) an(no) CCLXX[xxi
...]ulius P. f. [cooptatus
A]grippa Menen(io) T. f(silio) Lanato, T. Q[uinctio] Capitollino cos.
post R(omam) c(onditam) an(no) CCCX[iii
...]us Q. f. P. nepos Fu[...]
Q. Sulpicio . . . f. . . . n. Longo, Q. [Fabio Ambusto tr. mil.
[post R(omam) c(onditam) an(no) ccclxi]*

Three fragments were previously known.

Augurium Salutis.—In *C. R. Acad. Insc.* 1911, pp. 49-53, R. CAGNAT discusses an inscription recently found in Rome and published in *Not. Scav.* 1910, pp. 132 f. in which there is mention of an *augurium maximum quo salus p. r. petitur* in the years 3 and 17 A.D. This is the same as the *augurium salutis* mentioned by Dion Cassius (XXXVII, 24, 1) in which information was sought as to whether the gods wished to be asked to grant safety to the Roman people. Incidentally it is shown that in Tacitus, *Ann.* XII, 23 we must read XXV with the manuscripts, not LXXV with the editors.

The Composition of the Monumentum Ancyranum.—In *R. Stor. Ant.* XIII, 1909, pp. 41-46, Dr. Vulić examines the arguments which have been brought forward to prove that the Monumentum Ancyranum was written at different times by different persons, and finds them inconclusive. The various sections of the document may have been composed at different times, but this does not preclude their having been fused and combined by Augustus himself.

The Tabula Iliaca.—In *Rend. Acc. Lincei*, XIX, 1910, pp. 933-942, H. MANCUSO gives a new recension of the inscription of the Tabula Iliaca Capitolina with complete apparatus criticus.

Inscriptions Relating to Roman Campaigns in Palestine.—In *Pal. Ex. Fund*, XLIII, 1911, pp. 91-97, J. OFFORD and H. H. C. GIBBON publish Roman inscriptions referring to campaigns in Palestine under Vespasian and Hadrian that have been discovered since the publication of previously known inscriptions of this sort in *S. Bibl. Arch.* XXIV, 1902, pp. 325-328; XXV, 1903, pp. 30-33; and XX, 1898, pp. 59-69.

An Inscribed Wooden Diptych from Philadelphia.—In *C. R. Acad. Insc.* 1910, pp. 795-807, J.-B. MISPOULET discusses the Latin inscription on a wooden diptych found at Philadelphia in the Fayum and published by Lefebvre in the *Bull. de la Soc. Arch. d'Alexandrie*, 1910, pp. 39 ff. It is a statement that the veteran to whom it belonged had fulfilled the necessary formalities for entering upon the privileges accorded to him and to his children by the imperial constitution. It thus represents a new type of document.

A Correction to C.I.L. XIII, 5748.—In *B. Soc. Ant. Fr.* 1910, pp. 237-238, É. ESPÉRANDIEU publishes a correction of *C.I.L.* XIII, 5748. The stone reads,

<i>D</i>	<i>M</i>		
<i>Craxallo</i>	<i>itt</i>	<i>Indirci</i>	<i>niaii</i>
<i>Hilarus.</i>	<i>Fil.</i>	<i>P. C.</i>	

The break in *Inderciniae* is due to a defect in the stone.

Curious Interpretation of a Roman Inscription.—At Etting, north of Ingolstadt, is a church of St. Michael in which the "Three Wretched Saints" Archus, Herenneus, and Guardianus are worshipped. Their names, and perhaps in part their story, are the result of misinterpretation of a Latin inscription on the grave-stone of one D. Herennius Secundus. (F. VOLLMER, *Sitzb. Mün. Akad.* 1910, No. 14. 24 pp.)

Latin Inscriptions in the Pyrenees.—In *R. Ét. Anc.* XIII, 1911, pp. 79-81, C. JULLIAN republishes several Latin inscriptions in towns in the Pyrenees incorrectly read. At Soulan the supposed dedication to Mithra (*C.I.L.* XIII, 379) consists of modern letters traced over an ancient inscription in which the name of Mithra did not appear. At Vienne-Aure *C.I.L.* XIII, 378, proves to be a modern dedication bearing the date 1595.

Notes on Dacian Inscriptions.—In *Klio*, X, 1910, pp. 495-505, G. TÉGLÁS publishes 109 Latin inscriptions found in the territory of ancient Dacia between 1892 and 1907. Most of them are small fragments.

A Mithra Inscription.—A Mithra inscription of the time of Septimius Severus in Latin is published in *Rom. Mitt.* XXV, 1910, pp. 263-272 (fig.) by T. SAUCIU.

Epigraphic Bulletin.—In their review of epigraphic publications for September-December, 1910 (*R. Arch.* XVI, 1910, pp. 441-479) R. CAGNAT and M. BESNIER give the text of 91 inscriptions relating to Roman antiquity, with notes on epigraphic publications and full indices.

COINS

The Monetary System of Etruria.—In *Dolgozatok az Erdélyi Nemzeti Múzeum érem- és régiségtárából*, II, 1911, pp. 128-173, E. KOVÁCS discusses in detail the coinage of the Etruscans, correcting in certain particulars the work of Deecke.

Haeberlin on the Metrology of Early Italian Coinage-Systems.—The third and final instalment of the Italian translation by SERAFINO RICCI of Dr. Haeberlin's now well-known article ('Die metrologischen Grundlagen der ältesten mittelitalischen Münzsysteme,' in *Z. Num.* XXVII, 1908, pp. 1-115) appears in *R. Ital. Num.* XXIV, 1911, pp. 77-118.

Aes Grave.—In his *Aes Grave* E. J. HAEBERLIN has published a monumental work on the heavy bronze coinage of Italy. The text describes each coin, and gives a list of the known specimens of each variety. In one case as many as 1168 specimens of a single *as* are catalogued. The work thus assumes the character of a corpus. Many of the coins are in the author's possession. The plates are especially good, and reproduce every variation. [*Aes Grave Das Schwergeld Roms und Mittelitaliens.* Von Dr. Jur. E. J. HAEBERLIN. Frankfurt a. M., 1910, Joseph Baer & Co., Vol. I, xxviii, 280 pp.; pl. 4 to. Vol. II, 103 pls. with 2953 figs. Folio. M. 150.]

Babylonian Origin of *as*, *aes*, *randus*, *uncia*, *libra*.—ERNST ASSMANN, in *Nomisma*, V, 1910, pp. 1-9, argues that the words *as*, *aes*, *randus*, *uncia*, and *libra* are all of Babylonian (or even Sumerian) origin, and were brought into Italy along with the Babylonian weight-systems (cf. HAEBERLIN in *Z. Num.* XXVII; *A.J.A.* XIII, p. 224), by actual settlers from Babylonian-Assyrian territory, probably toward the end of the second millennium before Christ, at all events, several centuries before the Greeks knew anything about Italy.

He finds Babylonian derivatives in many of the place-names of early Italy. In view of these arguments he would correct many statements made by modern historians and etymologists concerning the primitive history of the country.

A Coin of the Sontini.—ETTORE GABRICI publishes in *Num. Chron.* 1910, pp. 329-332 (cut), an almost unique silver coin weighing gr. 5.30, which he would attribute to the Sontini, a people of Lucania known only by a single reference in Plin. *N.H.* III, 15. It bears on the obverse a figure of a bull with reverted head, and the inscription OM, while on the reverse the identical type is repeated, but incuse.

Virgil and Coin-Types.—ALBERT W. VAN BUREN suggests that in at least five passages in Virgil's *Aeneid* (I, 444; III, 551, 702, 703 f., 705) the poet was influenced in his description by well-known coin-types. (*Num. Chron.* 1910, pp. 409-411.)

Unpublished Roman Coins.—To his many previous papers of the same sort, FRANCESCO GNECCHI adds another, in which he describes, and illustrates in large measure, 110 unedited Roman coins, ranging in period from Augustus to Valentinian III, that have come into his possession during the last three years, among them some of first importance, including an Antoninianus of Iotopianus, and a few new medallions. (*R. Ital. Num.* XXIII, 1910, pp. 449-472; 3 pl.)

Roman Medallions.—In an article under the title 'La Medaglia presso i Romani,' FRANCESCO GNECCHI summarizes his views concerning the evolution of the imperial Roman medallion in various metals, as a commemorative and not a monetary issue, and gives illustrations of the various types. (*R. Ital. Num.* XXIV, 1911, pp. 11-18; 2 pls.)

The Denarius of Accoleius.—GIOVANNI PANSA believes that the three *Nymphae Querquetulanae* on the reverse of the denarius of P. Accoleius Larisculus (Babelon I, Accolēia 1) represent the caryatid-front of the shrine of the deities. He points out other instances of the worship of deities in the shape of trees, and especially calls attention to a similar early shrine of Mercury, in Rome, restored by M. Aurelius, and pictured on a coin of that emperor—Cohen III, M. Aurelius, No. 534. (*R. Ital. Num.* XXIII, 1910, pp. 473-478; 2 cuts.)

The Cognomen of Antoninus Pius.—On numismatical evidence C. HAROLD DODD argues that Pausanias (VIII, 43, 45) was right in his *obiter dictum* that "the Romans called this emperor Pius because he was conspicuous for the reverence he paid to the Divine." (*Num. Chron.* 1911, pp. 6-41; 2 pls.)

The Coins of Antoninus Pius.—In *Rec. Past.* X, 1911, pp. 17-33 (3 figs.); 77-91, F. S. DUNN discusses the coins of Antoninus Pius.

Dusares on a Coin of Commodus.—In *R. Num.* 1911, pp. 69-85 (pl.), C. R. MOREY publishes ten coins of Bostra, Arabia, found by the Princeton University expedition to Syria, and now at Princeton. The most important of them is an unpublished bronze of Commodus, having on the obverse the draped bust of the emperor, and the inscription AVP ΚΟΜΟΔΟC KAIC VΙΟΓ EV; and on the reverse a draped bust of the god Dusares, wearing a fillet and inscribed, BOCTPHN ΛVN ΔΟVCAPHC. This is the first anthropomorphic representation of Dusares to be discovered, although the existence of such a type had been conjectured. Another coin

has on the reverse a wine press as symbolical of the god. The coins furnish evidence that in late times Dusares was identified with Bacchus.

Unique Medallion of Carus.—In *R. Ital. Num.* XXIII, 1910, pp. 427-448 (cut), FRANCESCO GNECCHI publishes from his own collection a unique bronze medallion with brass rim, bearing on one side the bust of Carus with inscription, and on the other the bust of Magnia Vrbica, with inscription. The piece is in mint state and unique, but of its authenticity the owner has no doubt. It came into Italy with a collection of nearly three thousand specimens of Roman coinage that had been formed about a century ago, by a now unknown collector. Most of the other coins were in poor (or worse) condition, and about a hundred of them were false. To Gnechi's article is appended a letter by ATTILIO PROFUMO, which reviews exhaustively the reign of Carus and his sons, with especial use of numismatic evidence, and points out that this medallion establishes the previously unknown facts that Magnia Vrbica was married to Carinus while Carus was yet living, and that Carinus was formally associated with Carus in the empire.

Roman Coins from Corstopitum.—Mr. Craster's report of Roman coins discovered at Corstopitum (*Num. Chron.* 1909, p. 431) is supplemented by another article in *Archaeologia Aeliana* (3d ser., Vol. VI), in which he also gives a list of all coins earlier in date than 260 A.D. found during the last season. He believes F. A. Walters right in supposing the coins of Antoninus Pius with the "Britannia" reverse to have been struck in Britain (G. F. Hill dissents). Mr. Craster further notes that the Christian symbol of the cross occurs on a coin of the London mint of the reign of Constantine earlier than its appearance on coins from the mints of Rome, Trier, Lyons, or Arles. He also chronicles the finding of a large bronze coin of Septimius Severus struck at Hadrianeia on the Hellespont, "one of the few authenticated instances of a 'Greek Imperial' found in Britain." (G. F. H., *Num. Chron.* 1910, pp. 413-414.)

Imitation of Roman Coins in Britain.—The description of a hoard of Roman and British coins found in an earthen pot at Southants some years ago furnishes G. F. HILL with a text for valuable comment. The pieces were 677 in number, the Roman coins (forty-one genuine and imitated) ranging from the second century before to the second after Christ. Mr. Hill judges that some of the plated denarii, which we are wont to believe were struck at Rome for use among the barbarians, were made by the barbarians themselves, but that the imitations of early Roman copper found in Britain were importations from Gaul. He also describes the cast British coins, the long series of which, starting from recognizable imitations of struck coins, show a prodigious degeneration. This hoard furnishes the first known incontestable evidence of such cast coins of British origin. (*Num. Chron.* 1911, pp. 42-56; 3 pls.; fig.)

Astrological Symbols on Coins of Constantine.—In *B. Soc. Ant. Fr.* J. MAURICE calls attention to three types of coins of Constantine having upon them symbols with astrological significance.

GENERAL AND MISCELLANEOUS

Prehistoric Archaeology in Italy.—In *Preistoria* (Rome, 1911, Accademia dei Lincei, 72 pp.), L. PIGORINI surveys the history of prehistoric

archaeology in Italy during the past fifty years, chronicling the principal excavations and discoveries.

The Nuraghi of Sardinia.—In *R. Arch.* XVII, 1911, pp. 6-14, L. CH. WATELIN discusses the primitive monuments of Sardinia and classifies them as follows:—First neolithic state: caves, rock shelters, stations. Eneolithic state: dolmens, menhirs, alignments. First and second bronze states: quadrangular and round monuments analogous to the talayots. These appear to have been constructed by a population that came from the west, *i.e.* from Spain and the Balearic Islands. Third bronze state: the nuraghi proper, erected by a people that came from the east, spread over Sardinia, attained considerable maritime power, and perhaps pushed its incursions as far as Minorca.

Dolmens and Tombs of the Giants.—In *B.S.R.* V, 1910, pp. 89-137, DUNCAN MACKENZIE describes his discoveries among the dolmens, Tombs of the Giants, and nuraghi of Sardinia in the autumn of 1908, and brings forward new evidence in support of the theory that the dolmen developed on Sardinian soil into the *Tombe di Gigante*, which thenceforth continued to be the family tomb of the people of the nuraghi throughout the Bronze Age.

Cretan Proper Names among the Etruscans.—In *Klio*, XI, 1911, pp. 26-47, A. KANNENGIESSER shows that practically all of the names of places on the coast of Crete reappear in Italy in names of persons or places of Etruscan origin; and the same is true of a considerable number of Cretan personal names. He concludes that there must have been a powerful invasion of Cretans, or of people of the same stock, into Italy. At least, the early inhabitants of the islands of the Aegean had an important part in the settlement of Italy.

The Beginnings of the First Iron Age in Italy.—In *R. Arch.* XVI, 1910, pp. 378-400 (5 figs.), T. E. PEET discusses the beginnings of the First Iron Age in Italy and concludes that: (1) The earliest Italian civilization of the Iron Age is a complex phenomenon, due to various causes. (2) This civilization, as found in Latium, is very probably derived from that of the terramare. (3) The civilization of Villanova and of Tuscany seems also to have roots in that of the terramare; at any rate, it contains many indigenous Italian elements. (4) There is no proof at present that the civilization of Iron was introduced into northern Italy by an invasion from central Europe. (5) Greek and Oriental influences are noticeable in the last phases of the Iron Age, but are wanting, or hardly recognizable, in its beginning. (6) In the late phases of the Iron Age northern Italy exerted influence upon central Europe, but before that time the reverse was probably the case, and it is possible that many influences which determined the character of the civilization of northern Italy in the First Iron Age may have come from central Europe. (7) Southern Italy was much more under the influence of the Mediterranean countries, but also, in some measure, under that of northern Italy.

A Silver Girdle and Chatelaines of the Iron Age.—In *Rend. Acc. Lincei*, XIX, 1910, pp. 751-766 (6 figs.), G. BELLUCCI describes a girdle of thin silver of the second period of the Iron Age, with three-lobed pendants attached, and also several ladies' chatelaines of the same period, consisting of fibulae with a pendant of wire bent in loops, holding toilet articles, two

nail-cleaners, two pairs of forceps, and two ear-spoons. In the light of these he explains other fibula-pendants previously misinterpreted. These articles were found in the necropolis of Norcia (Umbria), and were intended not for practical use, but for adornment of the dead. Among other things found there is a black cup of terra-cotta with a Bacchic procession of children, inscribed L · CANOLEIVS · L · F · FECIT

The Early Settlements at Coppa Nevigata.—In *Ann. Arch. Anthr.* III, 1910, pp. 118-133 (pl.; 5 figs.), T. E. PEET discusses the prehistoric site excavated by Mosso on the hill of Coppa Nevigata, near the town of Manfredonia on the Adriatic coast of Italy. He argues that the remains of the iron foundry discovered in the upper stratum are later in date than Late Minoan III a; that is, that it is not Mycenaean, as Mosso thought. He admits that the "white incised" pottery of the middle stratum resembles that of Bosnia, but denies its Aegean origin. He concludes that this settlement was not made by terramare people, but may have been made by the earlier inhabitants of the district under the influence of the terramare civilization.

The Walls of Rome.—In a paper read before the Imperial German Archaeological Institute in Rome, January 26, 1911, G. Boni discussed the city walls, showing that the oldest were built of tufa and peperino. There was no moat. In many places remains of bricks are found between courses of tufa, and these portions date from about 88 B.C. He thinks the walls which have come to light between the Via delle Finanze and the Via di S. Susanna earlier than the Gallic invasion. He also concludes, from finding terra-cotta fragments in the oldest walls, that Roman imperial buildings of the first century A.D. such as the aqueduct of Trajan were not built of brick, but of roof-tiles which had belonged to earlier buildings. The stamps on the tiles are, therefore, no evidence for the date of these buildings. Boni also argued that the swallow-tail cuttings on the squared blocks served no practical purpose, but, like the double eagles, had a purely symbolical meaning. (*Kunstchr.* XXII, May 5, 1911, cols. 399-400.)

The Date of the Servian Wall.—In *Klio*, XI, 1911, pp. 83-123, P. GRAFFUNDER shows that the parts of the Servian wall built with the Oscan foot as the unit date from the time of the kings; and that the parts having the Roman foot as the unit date from a rebuilding after the capture of the city by the Gauls. The Roman, that is, Solonian foot, was known in Sicily in the fifth century B.C., and it is not surprising to find it in use at Rome in the fourth century. This conclusion is supported by the masons' marks on the stones. The forms used for N, P, and Z are earlier than 379 B.C.

Old Apulian Terra-cottas.—The survival of primitive native characteristics in Apulian terra-cottas into the time when Greek and Samnite influences were also prevalent in that region, and even the collocation of the two distinct grades of artistic development in the same object, are shown by M. MAYER, *Jb. Arch. I.* XXV, 1910, pp. 176-192 (13 figs.).

The Location of Clusium.—In *Mél. Arch. Hist.* 1910, XXX, pp. 373-395, D. ANZIANI identifies the site of the modern town of Orbetello as that of the Clusium mentioned by Virgil (*Aen.* X, 167), by Servius in his commentary *ad loc.*, and by Polybius (II, 25) in his description of the Gallic invasion of 225 B.C. Mons Massicus in the same passage in Virgil is, therefore, the ancient name of Monte Argentario, which, as mons Argentinus, occurs first in Rutilius. Succusa of the *Anonymous Ravennas* is located by

Anziani at the foot of Poggio Malabarba, and portus Cosanus identified with portus Herculis of the *Tabula Peutingeriana*.

The Fortifications of Civita.—In *B.S.R.* V, 1910, pp. 203-212, C. L. WOOLLEY describes the remains of fortifications at the site known as Civita, in the valley of the Sabato, eight kilometres from Serino, assigning them to the early centuries of our era, and showing that the conjectural identification of this site as that of the chief town of the Sabatini made by Cluver, or of the Picentini made by Orilin, are without foundation.

Topography of the Roman Campagna.—In *B.S.R.* V, 1910, pp. 214-431, T. ASHBY continues his work on the classical topography of the Roman campagna. The present instalment is Part 3 of Section II, and deals with the Via Latina and adjacent territory from the tenth milestone to its junction with the Via Labicana, the principal subject being ancient Tusculum and its immediate surroundings.

The Warehouses at Ostia.—In *Mé. Arch. Hist.* XXX, 1910, pp. 397-446, J. CARCOPINO discusses in detail the existing remains and the arrangement of the extensive warehouses (*horrea*) that lie between the great temple and the Tiber at Ostia.

The Date of the Lex Latina.—In *Rend. Acc. Lincei*, XIX, 1910, pp. 687-704 and 788-809, E. PAIS writes about the probable date and nature of the *lex Latina* of Heraclea. He concludes that it is somewhat later than the time of Marius and Sulla and that the period of Caesar's first political activity (65-59 B.C.) marks the *terminus post quem*. The supposition that it is a *lex satura* is less improbable than the conjectures of Legras, Savigny, and others.

Pantheistic Monuments.—In *Jh. Oest. Arch.* I. XIII, 1911, pp. 176-199 (24 figs.), R. WEISCHÄUPL discusses a series of monuments upon which a number of attributes characteristic of various divinities appear. A Liber Pantheus is known from inscriptions; but an altar at Pola, which is similarly decorated with emblems, is dedicated *Isidis imperio*. The writer shows that Isis, as earth mother, was associated with all the divinities of fertility, and hence might have their peculiar symbols. Like Isis Panthea, Venus Panthea might be honored with many emblems. All the monuments discussed belong to the second century A.D.

The Cult of the Roman Emperors.—In *Klio*, XI, 1911, pp. 129-177, H. HEINEN collects and arranges chronologically the references to the deification of Julius Caesar, which began as early as 48 B.C. He also adds similar references for M. Antonius, S. Pompeius, Augustus, Livia, M. Agrippa, Julia, C. and L. Caesar, and Tiberius Claudius Nero.

The Solar Dynasty of the Second Flavians.—In *R. Arch.* XVII, 1911, pp. 377-406 (11 cuts of coins), JULES MAURICE discusses the worship of the sun by the Emperor Julian and his predecessors, Julius Constantius, Constantine, Constantius Chlorus, and Claudius II. This worship supplanted that of Jupiter and that of Hercules, to which the previous dynasties had been devoted. The sun has the name of Apollo or of Sol Invictus, according to circumstances. The author traces the progress in various parts of the empire, especially in Gaul, of the worship under discussion.

The Fighting Position in the Maniple.—In *Klio*, X, 1910, pp. 445-461, T. STEINWENDER discusses the fighting position of the soldier in the maniple.

Convex Glass Mirrors.—In *Jh. Oest. Arch. I.* XIII, 1911, Beiblatt, cols. 261-270 (5 figs.), E. NOWOTNY calls attention to the publication of 62 convex glass mirrors by E. Michon in *B. Arch. C. T.* 1909, pp. 231 ff. and adds eight more to his list previously published, *ibid.* cols. 107-128 (*A.J.A.* XV, p. 248). 134 of these mirrors from different parts of the Roman empire are now on record.

Fish-shaped Roman Counters.—In *Röm.-Germ. Kb.* IV, 1911, pp. 26-29 (2 figs.), F. J. DÖLGER discusses the meaning of certain objects shaped like animals and fruits and dating from Roman times. They are usually regarded as *tesserae conviviales*, which were distributed at banquets and gave the recipients the right to presents. Dölger publishes six ebony fishes belonging to this class now in the museum at Trèves, and holds them to have served as counters in games, along with the usual round calculi.

Minuscule Writing at Rome.—In *Mél. Arch. Hist.* XXX, 1910, pp. 447-474, E. D. PETRELLA defends the view held by Sickel, Monaci, and others, that a distinct form of minuscule writing was developed at Rome, independently of the Caroline minuscule which originated at Tours, and gives a list of manuscripts that seem to him to support his opinion.

The Fire of Nero.—In *R. Stor. Ant.* XIII, 1909, pp. 3-29, Dr. Profumo replies to C. Huelsen's note in *A.J.A.* XIII, pp. 45-48, in regard to the cause of the fire of Nero. Huelsen had pointed out that on the night before the fire there was a full moon, and that, had Nero been plotting to destroy the city by fire, this night would never have been chosen. But Profumo thinks that the documentary evidence which he publishes proves that Nero was responsible for the fire.

SPAIN AND PORTUGAL

A Greek Relief at Jávea.—In *C. R. Acad. Insc.* 1911, pp. 164-169 (fig.), P. PARIS describes a relief found at Jávea, Spain, about twenty years ago. It is a plaque of native marble 59 cm. long and 28 cm. high, broken at the bottom and ends, upon which are carved three figures: a youth on horseback wearing a helmet upon which is a star, preceded and followed by a man on foot. The mounted youth is identified as one of the Dioscuri. The relief was carved at Jávea, as the native marble shows, but in style it is Greek and probably the work of a Greek sculptor. In the opinion of M. Collignon and E. Pottier it was a votive relief dating from the fourth century B.C.

Iberian Vases at Saragossa.—In *Mon. Piot*, XVII, 1909, pp. 59-74 (10 figs.) P. PARIS publishes nine vases in the museum at Saragossa in which the decoration consists of linear combined with floral elements. These he thinks are of Iberian manufacture, but show certain Mycenaean traditions. They have no connection with Phoenician pottery as has been suggested.

The Dolmens of Boulhosa.—In *O Archeólogo Português*, XIV, 1909, pp. 294-296 (2 figs.), J. L. DE V(ASCONCELLOS) describes four dolmens examined by him in 1905 in Boulhosa (Alto-Minho), Portugal.

FRANCE

The Protohistoric Ages in the South of France and in the Spanish Peninsula.—In *R. Arch.* XVII, 1911, pp. 15-40, L. JOULIN adds to his

previous articles (see *A.J.A.* XV, 1911, p. 249) a second part in which he discusses the settlements belonging to the different epochs and periods in Southern France and the Spanish Peninsula to about the beginning of the Christian era. The earliest objects of iron found in these regions belong to the style of Halstatt II; that is, to the sixth and fifth centuries B.C. In those centuries there was also colonization by Phocaeans and Carthaginians. The wars in Italy and Sicily may well have been favorable to the extension of Phocaeans trade with the barbarians in the fourth and third centuries. At that time an increase of Greek influence is observed. The Roman conquest wrought further changes in the civilization of the southern Gauls. The Halstatt II period shows little Greek influence, while the La Tène period (fourth and third centuries B.C.) shows much more.

Bibracte. — A summary of the historical and cultural bearings of the remains of ancient occupation on Mont Beauvray, the site of the Aeduan Bibracte, with special reference to analogous conditions on German soil, is published by H. DRAGENDORFF in *Arch. Anz.* 1910, cols. 439-456 (plan). On this mountain top, raised far above the surrounding hill-country and very difficult of access, a primitive place of refuge grew into an important manufacturing and commercial town, which was maintained for about a century, or until Augustus removed the populace to Augustodunum (Autun) some fifteen miles farther east, in the plain. Hence the remains show both the native Gallic civilization and the first stages of the provincial, or mixed native and Roman, quite undisturbed by later developments, and are peculiarly instructive for all Roman frontier studies as well as for local and national matters. The houses are chiefly rectangular (not round), one-room, stone or wooden cabins, with sunken, plastered floors and thatched roofs; with a few larger more or less Romanized residences. The dead were burned and the ashes buried beneath the floors of the houses. The fortifications are of the familiar Gallic stone-and-timber construction. The industries were iron-working in all its branches, bronze casting, and enamelling. The coins belonging to the period of occupation are chiefly Gallic. The native pottery includes the coarse, late La Tène style, the fine bright-colored Gallic ware, and a partly Romanized black ware which was probably manufactured in Belgium. The Italian terra sigillata is much less common here than on the sites of Roman military camps. The remains as a whole bear a striking resemblance to the contemporary Celtic culture found at Hradisch in Bohemia. A prehistoric or at least pre-Roman cult was perpetuated here after the abandonment of the town, in a Gallo-Roman temple perhaps of the time of Hadrian, an early Christian apsidal church, and the mediaeval and modern chapel of St. Martin of Tours. Here, at the southeast corner of the old site, a yearly gathering at the shrine, with pagan rites and on the old pagan date in early May, and its attendant fair, account for a long series of later small objects, imperial Roman, Merovingian, Carolingian, mediaeval, down into the nineteenth century.

The "Sword of Brennus." — In *R. Arch.* XVII, 1911, pp. 130-134, D. VIOILLIER, with reference to an article by S. Reinach (*Anthropologie*, 1906, pp. 343-358 = *Cultes Mythes et Religions*, III, pp. 141-159) shows that the custom of depositing bent swords in graves was unknown to the Helvetians, but was practised in the valley of the Po, in Normandy, Champagne, and Croatia, and only in the third and second centuries B.C. It was pecul-

iar to certain families of Gauls, and all the bent swords belong to the second phase of the Gallic epoch. The beginning of this phase cannot be later than 250 B.C.

The Ruined Towers of Aquae Sextae.—In *B. Soc. Ant. Fr.* 1910, pp. 304-308, V. CHAPOT discusses the two round towers of Aix-en-Provence (Aquae Sextae) and the "Tour Magne" of Nîmes, arguing that they all date from the time of Augustus and were built to commemorate some important event.

Sculptures of Roman Gaul.—ÉMILE ESPÉRANDIEU continues his important publication of the ancient sculptures in France with a volume on Lyonnaise which is designated as the first part of volume three. It contains Nos. 1733 to 2755. Every piece of sculpture is described and illustrated at least once. Such well-known statues as the Venus Genetrix or Venus of Fréjus, and the Venus of Arles appear in this volume. [*Recueil général des bas-reliefs, statues et bustes de la Gaule romaine. Par É. ESPÉRANDIEU. Vol. III, Pt. 1. Lyonnaise.* Paris, 1910, Imprimerie nationale, vii, 476 pp.; 1250 figs.]

Gallic Divinities with the Serpent.—In *R. Arch.* XVII, 1911, pp. 221-256 (pl.; 8 figs.) A. J. REINACH, beginning with a stele in the museum at Nancy, discusses Gallic serpent-divinities and their relation to similar divinities of Italy, Greece, and early Crete. Indigenous deities in Gaul, as much earlier in Italy, lost their original forms under the influence of Greek anthropomorphism. The stele at Nancy represents a male and a female side by side, each holding a serpent. Twenty-eight representations of Gallic serpent-divinities are cited.

BELGIUM

Gallo-Roman Mythology.—In *R. Arch.* XVII, 1911, pp. 55-66 (4 figs.), GABRIEL WELTER discusses three reliefs of Gallo-Roman mythological subjects. The first, in the Lapidary Museum at Arlon (Belgian Luxembourg), represents an animal, apparently a female wolf, swallowing a small human being. Such representations occur on early Gallic monuments and in Romanesque art, but are rare in Gallo-Roman work. Evidently, however, the type persisted. The wolf is probably a deity of death. The second relief, in the Archaeological Museum at Arlon, represents (the lower part is wanting) a bearded man with raised hands. A horned serpent is twined about his arms and chest. This may be a new variant of the bearded Mercury with the horned serpent. The third relief, in the Lapidary Museum at Luxembourg, represents a standing, half-draped youthful male figure. In his left hand he holds a cornucopia, in the right, probably a patera. Beside him is a chest (*arca*), behind which is a stag's head, from the mouth of which a flood of round objects, probably coins, falls into the chest. Beside the stag's head was a bovine head, now much injured. In this relief the Gallic stag-deity is completely anthropomorphized, but the stag is figured incompletely beside him (as is also the bull). He was a god of plenty.

GERMANY

The Prehistoric Remains at Ofnet.—In *Die spaetpalaeolithischen Bestattungen der Ofnet* (Wurzburg, 1910, pp. 1-7; pl., reprinted from *Mannus*), R. R. SCHMIDT shows that the remains found at Ofnet date from the same

period as the Tardenois and Azilien types, that is, from late palaeolithic times.

The Roman Limes in Germany.—In *Dolgozatok az Erdélyi Nemzeti Múzeum érem- és régiségétárból*, I, 1910, pp. 1-117 (30 figs.; map), Á. BUDAY publishes a study of the Roman *Limes* in Germany as a preliminary work to the study of the Transylvanian *Limes*.

A Roman Terra-cotta Bust at Trèves.—A new interpretation of the large terra-cotta bust (see *Trierer Jahr.* II, 1909, p. 21) is given by P. WOLTERS, who thinks the figure is that of a matron deity with child. *Röm.-Germ. Kb.* IV, 1911, p. 29.

A Roman Relief.—In *Röm.-Germ. Kb.* IV, 1911, p. 33, J. JACOBS publishes a Roman relief measuring 0.95 m. by 0.35 m. with three figures representing Apollo, Minerva, and Mercury. The figures are rough and ill-proportioned. The slab which was found at Nassenfels in 1883 is now in the national museum of Munich.

Alsengemmen.—In *Z. Ethn.* XLII, 1910, pp. 969-970 (fig.), F. W. MOSEBACH supplements with 15 more recent examples a list of 35 *Alsengemmen*, so named from the island Alsen, where the most famous specimen was found. This list was published *ibid.* 1887, pp. 691 and 698. He gives an illustration of one found in 1903 near Bückelburg. In these gems skeleton-like human figures rudely scratched in the upper lighter colored stratum appear dark in a light field. It is uncertain whether the subjects represented are pagan or Christian.

A Clay Wheel.—In *Z. Ethn.* XLII, 1910, pp. 971 f., H. BUSSE describes a small clay wheel with four spokes, which he thinks a symbol of sun-worship, and an urn of the early Bronze Age, with fourteen bosses, part pressed out from within and part added to the surface. The first was found near the Tegeler See (Berlin) and the second near Gosen (Beeskow-Storkow).

HUNGARY

The La-Tène Cemetery at Apahida.—In *Dolgozatok az Erdélyi Nemzeti Múzeum érem- és régiségétárból*, II, 1911, pp. 1-69 (73 figs.), I. KOVÁCS describes the prehistoric settlement and La-Tène cemetery at Apahida, 16 km. from Kolozsvár.

GREAT BRITAIN

Stonehenge.—In *Z. Ethn.* XLII, 1910, pp. 963 f., C. SCHUCHHARDT summarizes an article of his on Stonehenge (published later in *Prähistorische Zeitschrift*, II, 1910, pp. 292-340). He regards the "astronomical stone" and the "battle stone" as having originally formed part of a second and older stone circle, and the altar stone is, he thinks, a fallen grave stele. Ashes and fragments of rough pottery found near the latter indicate a grave of the early Bronze Age (2100-1900 B.C., Montelius). He finds that discus-graves and hill-graves in the vicinity surround, in like manner, pit-graves, and, comparing similar circles in England and Scotland where stelae are still extant, and also the pit-graves of Mycenae, he concludes that Stonehenge and its like are not sun-temples, but graves, temples being at that time unknown, not only in northern Europe, but also in places where the Mycenaean civilization prevailed. He denies the astronomical orientation,

claiming that the Britons reckoned time from the beginning of the night, and had no occasion to note the sunrise in particular. *Ibid.* XLIII, 1911, pp. 163-169, W. PASTOR argues that Stonehenge is a temple for sun-worship, built according to Penrose and Lockyer in 1680 B.C. He points to Hecataeus's statement in Diodorus, that there was in the island of the Hyperboreans, opposite the land of the Celts, a remarkable circular temple sacred to Apollo, and claims that Tacitus was wrong in denying temples to the Germans, since he twice, in his later histories, refers to particular temples. Schuchhardt, he says, errs in regarding the middle stone as a grave stele, in thinking that a mound formerly covered the whole, and that, since there is no entrance to the structure, it cannot have been a temple. Folk-customs and tradition, the exact orientation of the "battle-stone" and the "astronomical-stone," the via sacra, all contribute to show a temple for sun-worship. The surrounding hillocks could never have covered such great stones, and there are not one, but thirty entrances, the one toward the east slightly wider than the others. Ashes and poor pottery found in the centre must, therefore, come from a later interment. A discussion by Schuchhardt, Kiekebusch, and H. Schmidt follows.

AFRICA

The Mausoleum at Dougga.—In *C. R. Acad. Insc.* 1910, pp. 780-787 (fig.), L. POINSSOT describes the restoration of the mausoleum at Dougga, begun in 1908. Architectural fragments found in the vicinity make the restoration certain.

Astral Symbols on Funeral Monuments of Northern Africa.—In *R. Ét. Anc.* XIII, 1911, pp. 165-175 (10 figs.), J. TOUTAIN calls attention to the star and crescent, the sun, a head with rays, signs of the zodiac, etc., found on grave stelae of Northern Africa. They appear chiefly in towns which existed before the Roman conquest, and are not a Roman importation. The fact that the star and crescent are found on Punic monuments points to an Oriental origin. The signs probably had some religious significance.

An Italiote Cuirass.—In *Mon. Piot*, XVII, 1909, pp. 125-137 (2 pls.; 5 figs.) A. MERLIN publishes an Italiote cuirass found in 1909 in a Carthaginian tomb near Ksour-Es-Saf, 12 km. southwest of Mahdia. In the tomb were found a wooden sarcophagus containing remains of a skeleton with a girdle, and above in a niche in the wall a lamp and the cuirass. This consists of front and back plates ornamented with a head of Minerva below and two bosses above, while bands of decoration fill in the spaces between and run along the edges. The fastenings passing over the shoulders and around the sides still exist. This type of cuirass was used in Campania in the third century B.C. as is proved by vase paintings and by specimens actually found. The warrior who was buried in this tomb thus lived in the time of the second Punic war.

The Troglodytes of Jebel Garian.—In *Or. Litt.* XIV, 1911, cols. 1-14, E. BRANDENBURG describes a city of cave-dwellings that exists in the Jebel Garian on the eastern edge of the oasis of Tripoli. The houses consist of a sunken court, which is reached by a long, inclined passage, and from the court open out a number of cave-dwellings in all directions. The inhabitants belong to the Arab stock.

EARLY CHRISTIAN, BYZANTINE, AND MEDIAEVAL ART

GENERAL AND MISCELLANEOUS

A Coptic Representation of Christianity Triumphant. — In *Sitzb. Mün. Akad.* 1910, No. 3 (6 pp.; pl.), F. W. v. BISSING publishes a small bronze, of rude workmanship, in his collection. A nude female figure stands with crossed legs on a beast's head. In her raised hands she holds a wreath and a palm branch. About her is a sort of hoop, which rises from the foot of the whole object, and bears at the top, above the head of the figure, a Coptic cross. On separate leaves or branches extending outwards from the hoop are four birds, — two doves, and two cocks. The whole symbolizes Christianity triumphant, and serves to explain several hitherto imperfectly understood Coptic works.

The Treasure of Stūmā. — In *R. Arch.* XVII, 1911, pp. 407-419 (pl.; 2 figs.), JEAN EBERSOLT publishes and discusses four objects of silver which were found at Stūmā, in the district of Aleppo, and are now in the Museum at Constantinople. One is a liturgic fan (gilded) adorned with a design of a winged cherub or seraph in the middle and a border of feathers. On the handle are inscriptions made with stamps. The three other objects are plates. On one is Jesus (represented twice) giving bread and wine to the twelve disciples. This plate is gilded, and has an inscription on the rim. The other two plates are not gilded. In each a cross is incised. One has an inscription. The style of the work and the letters of the inscriptions point to the latter part of the sixth or the early part of the seventh century, as the date of these products of Syrian industry.

Islamic Ivory Caskets. — In *Jb. Preuss. Kunsts.* XXXII, 1911, pp. 117-142, E. DIEZ finishes his account of Mohammedan painted ivory caskets. Their ornament consists in animal and human figures, hunting-scenes, and even Christian subjects. Their general style is that known as the Seljuk imperial style, which flourished in Mesopotamia and Syria in the twelfth and thirteenth centuries, and was carried also into Egypt and Asia Minor. Most of the caskets originated in Syria and Mesopotamia. Occasionally one shows indications of Egyptian provenience, and it is possible that a few were made in Southern Italy, or Sicily.

Miniatures in a Syrian Manuscript. — In *Mon. Piot.* XVII, 1909, pp. 85-98 (5 pls.) H. OMONT publishes a Syriac manuscript of the seventh or eighth century recently acquired by the Bibliothèque Nationale. It originally contained the Old and New Testaments with illustrations, but now only the Old Testament remains with twenty-three of the original thirty miniatures. These are described in detail.

The Mosaics of St. Demetrios. — In *C. R. Acad. Insc.* 1911, pp. 25-32, C. DIEHL shows that the publication of the mosaics of the church of Saint Demetrios at Salonica (see *A.J.A.* XIII, p. 522; XIV, p. 527) in the *Bulletin de l' Institut russe de Constantinople*, needs revision in several places. Much useful information concerning the scenes portrayed may be found in the *Miracula* of St. Demetrios, written in the seventh century. Several of the panels were constructed at the expense of certain donors, as inscriptions prove. The words *βάρβαρον κλίνωντα βαρβάρων στόλων* of one inscription refer to the attack of the Slavs on the town about 617-619 A.D. Of the

